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Friendly Camera-Trails

W. ROBERT MOORE

THAT photography has a universal appeal may readily be gathered from the volume of business transacted annually by any manufacturer of standard photographic supplies, and by the number of films that are dropped to be developed at the corner drug-stores after a bright sunshiny week-end in spring. It has struck a responsive chord in human nature by its adaptability to reproduce man's experiences and interests.

In the words of a popular photographic advertisement, a camera does "bring back your vacation" in the form of an enjoyable permanent record, so that its many delightful associations may be recalled frequently. But the snapshot photograph in its wider field of usefulness establishes world contacts and humanises our geographical knowledge.

The click of the ever-ready camera in all corners of the world has made it possible for us in our fireside-travels to follow strange trails in those distant lands, showing the activities and customs of strange peoples with a familiarity that word-pictures do not always give. Writers have wasted many adjectives in vain attempts to portray the charming reflected beauty of the Taj Mahal, which a single photograph will reveal. The fantastic erosions of our western national parks, the *fiesta* costumes of the South American Indian, and a multitude of other subjects are equally difficult to describe.

Picturing the common people of foreign countries as they go about their daily tasks and attend their different functions has a joy all its own. A Jivaroan head-hunter of Ecuador may take singular pleasure in preparing the head of his victim for a lasting trophy to decorate his home, yet it seems hardly probable that all of those concerned share the same enthusiasm. However, the man who goes "head-hunting" with a camera constantly experiences the exchange of good will with his subject. Although there is often a barrier of language to overcome, yet in the glint of an eye or an ever-ready smile there is contained a priceless bit of friendly understanding.

What often counts most in the real enjoyment of a snapshot for the one who has made it is the "behind the scenes" story, humorous or otherwise, relative to its making.

On my desk are several well-filled albums in which I count many interesting memories recorded in scenes and in the expressions on the faces of the people living in a score of countries. These snaps, many of them caught by chance, reflect the atmosphere and characteristics of our foreign brothers and the lands in which they live.

One day up in central Persia our caravan stopped for the noontime at a little mud-village—so small, in fact, that it consisted of hardly more than the sprawling caravanserai—but in that place I had one of my most enjoyable camera-experiences. A youngster was hawking his high-piled store of huge slabs of pebble-baked bread, carried on his head, and eating some at the same time; several bearded worthies sat in a little knot guzzling tea and puffing languidly at their hubble-bubble water-pipes between bits of friendly gossip—a typical cross-section of rural Persia gathered in from the caravan-trail.

While making some exposures, I noticed an old desert-weathered chap in the group about me, looking on and enjoying himself to the fullest extent. He wore a gray two-weeks stubble on his chin, a greasy hat perched on the top of his shaggy hair, and clothes that hung in tatters. Certainly, life had not endowed him with

THE SPIRIT OF SOUTHAMPTON W. ROBERT MOORE

an abundance of earthly goods, yet he laughed as one without a care in the world. My few attempted words in Persian dispelled the momentary seriousness produced by the camera that I turned toward him, and his face wrinkled again with the natural radiance of his contagious smile. He was one of the best characters that I have ever seen. An enlargement of that snap hangs above my desk; for it glows with the pure joy of living.

Another happy recollection is of a little kinky-haired youngster that I met on a steamer coming up along the west coast of South America. He would scarcely stand as high as a man's waist, but he was companion and nurse-boy for a wailing Spanish child of nearly his own size. The second day out from port, when sleep had stifled the fretful cries of his noisy charge, he was down on the front hatch having a few profitable moments' gambling with some of the ship's crew! For the five days that he was on board his round ebony face framed a constant smile, and his teeth and eyes sparkled with sunshine—a wide-awake, one-hundred-percent boy. The morning that he was leaving the steamer at a dingy Ecuadorian port I got his picture; a bit of timidity and self-consciousness flickered in his expression, but the smile was there and made its appeal.

The frank smile carries with it a wealth of meaning. Indeed, it is the one form of communication that is universally understood in this world of confused tongues. With this one language in common with our foreign brothers, we can still create and maintain a friendly confidence with them that will endure. Some countries are noted for their geniality and happiness, even in the face of physical hardships, though others have not yet learned the full value of the smile.

As the facial expression is the barometer of the person's attitude, it is always the much-hoped-for aim of the camera-enthusiast to "get that smile" at its best. Yet tears are equally true to life. We remember in our own childhood-days how quickly the smile disappeared at the prospect of an enforced scrub with soap and water. A Siamese youngster is no exception; and, although he may lead an amphibious life sporting about in muddy canals, a formal bath is a different story. As characteristic a picture as I know is that of a little brown-skinned tot standing by a large water-jar voicing all of his pent-up opposition to a shower from a tin can.

The long railway journey in India from the Punjab to the coast at Karachi is at best a tedious ride. Although most people in India make a practice of traveling at night, day-travel cannot

always be avoided, and this route is one. The train that runs down through the choking dust and heat of the Sind desert turns from red to a dusty gray color long before it arrives at its destination. But here, as wherever one goes, subjects that are worthy of record are continually popping up, and an easily accessible camera provides a means of dissipating many a monotonous moment that would otherwise hang wearily upon one's hands.

At the countless wayside stations, I photographed the desert people as they readily disposed of their few melons and cucumbers to moisten the parched throats of the weary passengers. The women were laden with dozens of pieces of jewelry around their necks, wrists, and ankles, even though their clothes were ragged and dirty. After they had sold their stock they would pack a tin of oil or some other commodity on the backs of their camels and donkeys, and set off toward their homes somewhere beyond the uneven rim of sand.

At one station in particular, I found a dusky brown son of the Sind imposing on all of the good graces of his floppy-eared ass as he sat astride the hips of the tiny dwarfed beast with his feet dangling almost to the ground. While I got some snaps of the caricature he so innocently made, he sat quite enjoying the novelty of my photographic attentions.

A few years ago I was on a motor transport out from Bagdad. When we stopped at the little outpost town of Ramadi in the Euphrates valley to have our passports inspected before making the final span of four hundred miles across the desert to Damascus, the customs authorities withheld our passports and barred our proceeding. They would allow no one to cross the then new desert route between Bagdad and Syria except in a convoy of several cars. Less than a week before, a group of Arabs had swept down on a single car, killed two of the passengers, and had made off with some five thousand Turkish gold pounds they were carrying. For that reason the authorities affirmed that they could not be responsible for the risk, and we should have to wait until other cars out from Bagdad should join us.

THE ISPAHAN LIMITED W. ROBERT MOORE

During the days of our delay, I wandered about over the old trenches left from the Mesopotamian campaign in the World War. In the opposite direction from the village, I visited the Arabic nomads encamped under their camel-hair tents, and watched them irrigate their gardens along the murky Euphrates by the primitive method of lifting the water in huge leather-bags from

"HOLD THAT SMILE!" W. ROBERT MOORE

the river, using horsepower for the operation.

At an open-front coffee-shop near the village-bazaar, a picturesque group of Arabs, clad in flowing abas and tea-cloth head-coverings, congregated to exchange gossip over their coffee and narghile. A keen-eyed old fellow who leaned against the wall listened intently, but added little to the conversation. Years had lined his well-chiseled features with fine wrinkles and changed his beard to silver-gray; so he stood out in fine relief from the younger men about him. He was far from the interpretation of the dashing desert "sheikh" frequently seen on the celluloid film of the movie world. I focused my camera and asked if I could get his picture. He gave me a straight, penetrating look in consent, and then dismissed the thought of my camera from his mind. Who knows, perhaps he knew better than we the causes for the delay of our transport!

Whenever I photograph, I always try to obtain the friendly permission of the subjects. Some people require a great amount of coaxing to overcome their natural timidity, and others are as indifferent as was the old Arab.

In the beaten paths of tourist-travel, money has been scattered freely to obtain the good will of the people. A young Englishwoman that I once met, bragged about getting her subjects to pose by giving them a small coin, and her pictures were dear at that. Almost without exception, a bronze-statue would have been a lively object in comparison.

Although the coin has a friendly ring with some, it is often strangely out of place; so I try to avoid that method, if possible. A timely discarded sealing-tin for roll-films has won many a youngster; and a promised copy of a photograph has been equally effective in melting the resistance of a Thibetan lama or a Burmese

A Mellon Seller
Walking Soft-Drink Parlor

Tragic Moments
A Persian Smile

An Ebony Smile of Africa
A Son of the Sind

maid. I have made a snap of a Chinese and won his full friendship simply by letting him look through the ground-glass of the camera.

Once, however, when I was trying to get an exposure of several women, I allowed a curious onlooker to see the group through the camera. He was surprised that they appeared standing on their heads on the focusing-screen, and said as much; the women, distressed that I should see them thus inverted, shifted uneasily and then made off before I had succeeded in getting the exposure.

Women are usually more difficult to photograph, because they are more particular about their appearance than are men, and in many lands are naturally shy from much seclusion. A personal acquaintance is an invaluable aid. I secured the pose of a particularly attractive Spanish señorita in a Bolivian city only through a friend who had had long acquaintance with the relatives of the girl.

Once a Persian military officer and his wife—a closely veiled Moslem woman—were my traveling companions on post wagon for the three-hundred-mile journey between Shiraz and Ispahan. Now, the "Ispahan Limited" which carries the government mails between these two cities is far from a carriage *de luxe* that hurries one over the miles in a few short hours; for it is nothing more than a high-wheeled wagon, with a narrow, spreading box usually heaped to overflowing with wooden boxes and bulging bales, and drawn by four horses hitched abreast, which travels day and night. It is really "limited": limited in speed, comfort, and desirability, yet it is one of the quickest means of transportation if one must forego the luxury of motor-travel.

We became friends as travelers will, thus jostled day and night for a week over the execrable Persian roads. We even shared one another's food in the smoky tea-houses where we waited interminable hours for the horses to be changed, if indeed, there were fresh horses to be obtained. I exchanged liberal helpings of my "bully beef" for portions of *pilau* and large thin sheets of gray building-paper bread, and we were happy.

That friendship gave me a photograph of the little Mohammedan woman sitting with the others on the wagon, with her veil dropped back from her attractive face. It was her special request, however, that when I gave the promised photograph to the postman, his copy should have her face blotted out—a request which, of course, I respected.

In working with the primitive hill-tribes of North Siam, a short stay in the village, coupled with endless talk with the village-chief, usually led to success in photographing the women as well as the men. But they, as many of the illiterate people throughout the Orient, are afraid of the evil effects of the lens. Especially are mothers reluctant to allow their children to be pictured, for they anticipate all sorts of disastrous things that may come out of the black box.

Some few people even imagine that the camera has a strange X-ray power of seeing through their clothing. Then, too, there is the other type of individual who readily poses for his picture, rushes up to you immediately to get the result, and fails to understand why you can neither give it to him on the spot nor show him a portrait of himself in the view-finder.

One's enthusiasm for getting a photograph may, at times, bring forth peculiar situations. Although one's ignorance of various customs and the language in a foreign country usually gives a friendly balance in favor of the photographer, yet, even with an exercise of care, one gets into a quite unintentional circumstance.

The waterfront at Panama, where the small boats tie up with their cargoes of vegetables and other produce, makes an interesting market-scene well worth recording on a film. In order best to get the picture over the low wall that bounds that part of the waterfront, I stepped up on a near-by cart piled high with bags of charcoal. But in stepping up on it, the cart tipped, and I took an ungraceful roll, half buried with the bags of charcoal. A laugh at my expense went up from everyone about me except the woman who owned the cart. Not she! She reviled me with a constant stream of inelegant but expressive Spanish, and, even though I rolled the bags of charcoal back into place, the flood of words did not subside until I had withdrawn beyond hearing distance.

Another case of misunderstanding occurred at the world's most popular photographic studio—before the Sphinx and pyramids of Gizeh—where a commercial photographer has set up his camera, that no tourist need be disappointed in not possessing evidence that he has visited Egypt's monuments of antiquity.

A rotund German and his wife mounted on camels were having their pictures made when I arrived and set up my camera, and began focusing it to get an exposure as soon as they should leave. There was difficulty immediately! The German thought that I was trying to get his picture and didn't want me to do it, and told me so. The Egyptian photographer thought that I was trying to work him out of his profession, and voiced his protests as eloquently as he could in his native tongue.

Shylock of the Orient
Keepers of the Coffers of the Shwe Dagon

Friendly Siamese Smile
Sanitary Water Supply in Delhi

Keen-eyed Arab of Mesopotamia
In Front of a Persian Tea-Shop

GROUP TWO

W. ROBERT MOORE

THE WORLD'S MOST FAMOUS STUDIO — W. ROBERT MOORE

As I wanted to get the Sphinx in a truly Egyptian setting, I had no intention of disturbing them: so I told a young guide what I was doing. As neither of the offended parties personally owned the Sphinx, they received the explanations, and when the photographer squeezed the bulb his subjects were smiling serenely. That storm was over!

Aside from several large views of the Sphinx and pyramids, I have, curiously enough, a readily granted memento of the occasion, which I made with a less formidable-looking camera, showing the Egyptian artist hidden under the focusing-cloth while the couple from near the Rhine smilingly did their best pose.

There are many places in the world where the camera is the "open sesame" to many official kindnesses; sometimes it opens the door for witnessing special ceremonies. In other countries, the man with a camera is looked upon with disfavor. In Japan, I was told, no one was supposed to take a camera ashore. As it rained on my first day there, it was of little consequence that I had left my camera on the ship. But, even so, I saw several people with cameras. The next day I carried a camera, feeling for all the world as if I were trying to smuggle some contraband object ashore; yet, when the authorities saw it at the gate, they let me pass without a word. I have since made quite a number of photographs in Japan, and have learned that there are few restrictions except near military and naval fortifications.

I went to Persia in 1924, shortly after the tragic death of our American Vice-Consul at Teheran while he was making some photographs. Although I made many photographs wherever I went, I met with kind friendliness, and the officers in Teheran showed me every courtesy. They took the one precaution, however, that no crowd should gather about me.

Some subjects that are disliked by some have a distinct appeal to others. An old Burmo-Chinese money-changer in the market-place at Chiengmai in North Siam has been passed many times without thought, yet he makes an attractive photographic study. He sits in a little stall off to the side of the market changing *ticals* into *satangs* for the people who come in to purchase small quantities of vegetables and curries. At one time he had such control over the small change that was available that he was giving eighty-nine *satangs* in exchange for the *tical*—a profit of eleven *satangs* to himself! In the snap that I got of him, he looks every inch the part of his profession. Some can see in the picture only his ugly teeth and the straggling hairs on his thin lips and chin, while others see

the crafty eyes of an unscrupulous, scheming Shylock of the Orient sitting at his little table piled with bundles of big coppers tied together by a string through the hole in the center of the coins.

Those who are interested in recording the scenes of nature know that it, as well as people, is subject to changing moods. One must go stocked with an unlimited supply of patience, for it is often a long wait before one gets the desired snapshot of a particular view. Where it requires a few minutes to get a person in a friendly pose, hours and even days may be wasted before the conditions are satisfactory for a scene. I have seen the chaste white peaks of the Himalayas behave worse than a young girl when they would sulk behind a mass of heavy clouds, flirt coquettishly behind a fleecy veil of mist, and then, almost in a moment, drop it aside and shine in crystal radiance.

I tried for several weeks one season in late November and December, when the sun had worked its way southward, to get a satisfactory cloud-effect to picture the beautiful Wat Arun, on the west bank of the river at Bangkok, silhouetted against the sunset sky. On a promising night when I would go, the clouds would dissolve from the sky and the sun would burn its red path down over the horizon. Another night the clouds would mass heavily together and blot out the evening-light, and on two occasions they gathered so quickly that I was caught in a tropical downpour. At last my patience was rewarded. I got what has easily proved to be my most popular view in Siam.

On one trip home from the East about Christmas time, I found London plunged in the Stygian darkness of a five-day winter-fog which completely paralysed all outside traffic—the worst in thirty years, according to press-reports. In addition to every vehicle and street light, which was pressed into service, great flares burned on many of the corners to assist the local traffic.

HIMALAYAN SNOWS W. ROBERT MOORE

As the fog was clearing, a train which was again put into operation took us to Southampton. From the deck of the *S.S. Leviathan*, as the wheezing tugs were guiding her away from the pier, I got a small snap of the dry-dock, together with the huge steel cranes on the wharves and the low-hanging smoke from the funnels of the *S.S. Majestic* and other steamers. It caught the very spirit of that winter-day in Southampton.

Some photographs are not casually made, and a few of them are not without the tense moments that are experienced in any sport. In Cuzco, Peru, I climbed up in one of the bell-towers of the old church of La Compañía to get a view overlooking the plaza toward the Hill of Sacsahuaman, where the Spanish Conquistadores beat down the defense of the Inca ruler. I propped the tripod of my camera on the narrow ledge between a bell and the wall, so that I could show one of the four bells and frame the view with the casing of the opposite window. A companion inadvertently slipped and grabbed the rope of the bell to which I was holding while looking into the camera. Startled at the unexpected clang at such close quarters, I stood for a moment uncomfortably balanced on the narrow ledge before I could regain my equilibrium. When the photograph was recently published, few realised that in obtaining it I had narrowly escaped a fifty-foot fall to the street below.

In Cambodia the wind played a cruel prank on me by blowing my camera off a high wall while I was making some photographs of the exquisitely-carved Khmer ruins of Angkor. When it struck the stone-paved courtyard below, the lens was about the only part worth picking up; somehow, that had escaped destruction. As the camera had been made by the combined efforts of a Chinese teak-wood worker and a man whose sign read "CHiNG HiNG Brass and Machinery Make and Co. All Kinds Work Attempted", I later let them construct a new one.

With all his efforts, the camera-enthusiast does not always get the picture he most desires, and many subjects must remain only on memory's walls. It often happens that the subject moved at the wrong moment, the lack of light precluded the possibility of a proper exposure, or a young imp planted himself in front of the camera at the only moment when the view might be obtained. Those are the cares that threaten to turn the photographer's hair gray at the temples; if he attempts to dabble in color-photography his worries are multiplied.

Up in a little village perched on a mountain-top in North Siam, I finally succeeded in getting a group of Miao hill-tribe women to continue grinding corn in a rough stone mill instead of fleeing into the jungle beyond the clearing at the sight of my camera. In my hurry to get them, I spoiled one of my last three plates; but on the next I got the picture I had long desired. Later I got the head man of the village doing a special dance to the plaintive music of his piped bamboo instrument.

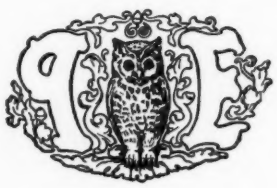
Not until six days later did I find water sufficiently clear to develop the exposures. In my darkroom tent, I developed my treasured plates with the utmost care. To my dismay I found that I had made both exposures on the same plate. My error had cost me two of my choicest subjects; the joy of that trail suddenly faded.

But my depression was insignificant in comparison with the gloom that hung about a disconsolate cameraman that I met in southern Peru. The charming Andean city of Arequipa, snuggled down in the beautiful valley at the foot of old brick-colored El Misti, and justly famous for its picturesque Spanish homes, exquisite carved-stone cathedrals, and stimulating sunshine, was his home.

True to nearly every city of Spanish occupation in South America, Arequipa boasts of its "Plaza de Armas" and many other small parks where fashion struts, bootblacks swarm, and nurse-maids take their charges for an airing. In one of these plazas the tall, gaunt photographer was carrying on a slender business with a small camera such as those seen at country-fairs which finish your picture while you wait.

His work would not elicit much enthusiasm for the quality of its workmanship; but he could claim distinction for being one of the original "tweet, tweet, see the birdie" artists. For on the side of the camera he had strapped a small wire cage for housing a live bird!

As he half-heartedly manipulated the exposed paper through the chemicals in the back of his camera, he was a picture of tragic despair; the door of the cage had sprung open and the bird had flown!



Photomicrography in the Service of Science and Industry

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WHAT a wonderful world of little-known and undreamed-of things lies on the other side of the microscopic eyepiece! Less than four hundred years ago man knew no more than the unaided eye revealed. Then came the telescope, and man came to know something of the nature of the stars which had served to direct his way since he first ventured off from shore in his small and crude boats. He came to know that this earth, which he in his ignorance and vanity had considered the center of the universe, was but a private among the hosts of heaven—but one of millions of like bodies, some a thousand times larger than that on which he dwells, all revolving year after year, each in its own path, with a regularity which attests of their obedience to the laws of the Maker.

At very nearly the same time came the microscope to extend the vision of man in the other direction. He found the existence of worlds within worlds. Each drop of water he found to contain a little world of small microscopic organisms, some of which he was to discover a little later were the source of many of the pernicious diseases which had in the past taken a heavy toll of human life. The unknown inventor of the microscope deserves to rank as one of the greatest of human benefactors. Beginning with the crude instrument of its early days, it has developed steadily, and so has its value to science increased with each succeeding decade. Its place in science is established and secure. Probably no other one instrument has aided in the development of so many widely diversified branches of science as has the microscope. So important has it become, and so varied are its applications, that today almost every branch of science is more or less indebted to it and is more or less dependent upon it for future development. Not only is this true of biology, entomology, pathology, botany, and the like, but of geology, metallurgy, and the various branches of modern chemistry as well. Used with ordinary light, with ultra-violet light, with the kinematograph camera, or as the ultra-microscope, the microscope is probably the greatest single instrument of science.

Photomicrography, or photography with the microscope, was a logical development, and may, in a certain sense, be said to antedate photography itself. Harrison, in his "History of Photography", states that Wedgwood and Davy attempted to secure pictures within the camera on their paper prepared with silver chloride, but without success. "Davy, however, using the concentrated light of the solar microscope, readily obtained images of small objects upon paper prepared with silver salts." This was in 1802; and from this time may be dated the conception of photomicrography. It was not until 1824 that Joseph Nicéphore Niepce, in France, was able to employ successfully the camera obscura; so that the first photomicrographs antedate the first camera pictures by nearly twenty-five years. Although Daguerre, at the instance of Arago, attempted to make a daguerreotype of the moon, there is no record of his having attempted photomicrography; but the following year an English clergyman, the Rev. J. B. Reade, with a process somewhat similar to that of Wedgwood and Davy, made a number of highly successful pictures through the microscope.

After the discovery of the wet-collodion process in 1851, papers on the subject began to appear in the journals, and not a little was done. The discovery of the gelatine dry-plate and the development of means for the color sensitising of plates served to increase its sphere of usefulness. At first, developments took place more rapidly in the field of biology; then it began to be extensively used in geology and in metallurgical investigations and, still later, it came to occupy an important place in the various branches of pure and applied chemistry. In this last field, we are on the threshold of a new chapter—a science which has just begun, and one from which much may be confidently expected.

In a short article such as this, little more can be done than to draw attention to a few of the many ways in which photomicrography is of service in the work of the world. A book might be written on the subject and yet fail to cover the subject fully. What we have to say, therefore, is merely by way of introduction—a synopsis.

The germ-theory of disease is not, as often thought, of recent conception. It appears to have

had its origin as early as 1546, in a work by Girolamo Fracastoro of Verona, which contains the first statement of the nature of contagion, infection, and disease organisms, and the way in which infectious diseases are transmitted. In 1683 Antonius van Leeuwenhoek, a Dutch naturalist, with a telescope of his own making, described several micro-organisms and showed drawings of them to the Royal Society; and in 1841 Fuchs, investigating blue and yellow milk under the microscope, detected the presence of an organism which he later isolated and, having grown a culture of it, introduced this into normal milk, whereupon this was converted into the blue condition, thus conclusively proving that it was due to this particular organism.

Among all of the biologists of the last century, however, the name of Louis Pasteur stands out pre-eminent. His life was one of service, devoted to science and to humanity. His mission was to save life—to free human life from its perils and pestilence. Without thought of self, with mind intent upon service, he spent a busy and fruitful life, one which from its message of devotion and service is an inspiration to every scientist. For what is the mission of the scientist but to serve? His studies on the organisms producing fermentation, on the diseases of the silkworm, on cholera, anthrax, and that for which he is best known—hydrophobia—mark his career as one of the greatest in all history.

After Pasteur, biology made rapid progress. Lister discovered antiseptics and thereby banished death from infection of wounds, doing away with hospital gangrene and greatly lowering the mortality from infections following operations. Laveran, a French surgeon, discovered the organism producing malaria; Elberth, the bacillus of typhoid fever; and Klebs, the diphtheria bacterium. A few years later, Behring discovered the antitoxin for diphtheria, which considerably reduced the mortality from the disease.

In all of this work, the importance of which can hardly be overestimated, the microscope played an important part. It is impossible to say with any degree of surety to what extent we are indebted to the microscope for the progress which biology and bacteriology have made in the last half-century. We can only speculate on what could have been accomplished without the services of the microscope in rendering possible the examination of small organisms and the use of photography to record experimental data and observed results, thus facilitating communication between investigators.

It has been said that one of the greatest discoveries ever made by man, viewed in the light of its contribution to human progress, was the discovery of means by which metals might be separated from their ores. The study of the occurrence of ores, their distribution and physical character, is a very important part of geology, and of great importance to civilisation. So dependent are we upon metals that this age might well be termed the age of metals.

In petrology, photomicrographic analysis is in many ways the best form of analysis. Chemical analysis will be found to give quite readily the percentage of metal in a certain ore, but it cannot indicate the physical distribution of the metal within the ore, and this often determines whether the ore is of commercial value. Microscopic examination, however, provides the metallurgist with means of estimating quite accurately the distribution of the metal within the ore, and thus determines the commercial value of the ore, the difficulties of extraction, and the probable yield.

One of the most important tendencies in the industrial world in the past quarter-century, examples of which are to be found in every industry, has been the substitution, on an ever-increasing scale, of precision methods of control, based upon scientific data, for the rule-of-thumb methods depending largely on the skill and experience of the operator. There has been a greater tendency than ever before on the part of those engaged in the various branches of industry to look beneath the surface of things, to get at the underlying facts, to investigate the why and wherefore of the present empirical methods of manufacture, control, and testing with the idea of determining, if possible, their scientific basis and establishing precision methods of manufacture and testing, to the end that rule-of-thumb methods may be replaced by methods resting upon a definite scientific basis.

Engineering has witnessed this change in viewpoint. Virtually all of the larger engineering firms are now equipped with research laboratories in which the quality of the raw materials, as well as the finished product, are investigated, in order that irregularities, failures, and sources of weakness may be traced down and corrected. Such analysis involves, in a large number of cases, not only the usual methods of chemical analysis, but micro-examination. In the works laboratory of a large engineering firm, this last is a rather important item, since by its use information is obtained which cannot be well determined from other means of testing. So important has the science of examining metals through the microscope become that the results of a microscopic examination are quite often the determining factor in the acceptance

AGED AND STATELY
L. J. CREEGAN
HONORABLE MENTION—MY HOME

or rejection of metal for a given requirement.

Each particular alloy has its own characteristic appearance under the microscope. This appearance is governed by its structure, which in turn is dependent upon the composition, the temperature at which cast, the time taken for cooling, and upon subsequent treatment, if any. With plain carbon-steels an experienced person can tell fairly accurately the amount of carbon present, and from its state the treatment the steel has received. In this way it is possible to determine the properties of the steel and to tell for what purposes it is best suited. Chemical analysis may give the percentage of the various substances entering into an alloy, but it cannot show the state in which these exist in the alloy. This is, however, a matter of considerable importance to the engineer; for although the amount of an impurity in a certain alloy, as determined by chemical analysis, may not be above the total allowable, yet the microscope may show this impurity to be gathered into masses which affect decidedly the physical properties of the metal and make it unsuitable for stringent requirements. In much the same way the microscope assists in determining the amount of a given substance and the state in which it must exist to produce an alloy having a definite physical character. With certain non-ferrous alloys, such as manganese brass, the microscope is of great value for this purpose. During the melting of the alloy in the furnace, zinc, which becomes a gas at high temperatures, is driven off. If small amounts of the alloy are taken from the furnace at intervals, the amount of zinc which has been lost can be determined by an examination of the structure of the alloy. Thus it is possible, by means of microscopic examination, to keep the product to a uniform standard.

Owing to a widespread belief in the efficiency of established methods of chemical analysis, the progress of micro-analysis in pure and applied chemistry was slower than in biology and the other divisions of natural science. Its applications were in time recognised, however, and lately it has developed rapidly, until the diverse nature of its applications is a source of embarrassment to one who tries in a few short paragraphs to give an idea of its services in modern industrial chemistry.

It is, indeed, fortunate that micro-chemical analysis should be of most service in precisely those places where chemical analysis is of little or no practical value. For instance, not much progress was made in the study of the processes in sugar refining so long as chemical analysis of the finished product was the only method of examination employed. As soon as methods of micro-chemical analysis were adopted, several obscure points began to clear up, and the whole subject was placed upon a much firmer basis. Practically the same thing was repeated in the study of lubricating oils; and although this subject is one which is still largely obscure, micro-chemical analysis is proving to be of considerable assistance. We have here at the College one who has been at work on this phase of the subject for a number of years. In the cellulose industries, micro-chemical analysis has played an important part in recent years. For instance, paper makers had long known that certain grades of pulp were more suitable for a given grade of paper than others, and that by variations in the process of manufacture considerable differences in the quality of the finished product might be found even where the original pulp was practically identical. For the investigation of this difficulty, chemical analysis had made little headway. Micro-chemical analysis, however, at once indicated the connection existing between the various grades of pulp and the effect of varying manner of treatment on the quality of the finished product; and as a result of thorough investigation by micro-chemical methods, methods were developed whereby satisfactory grades of paper were produced from inferior grades of pulp.

In the study of high explosives, micro-chemical analysis has been of considerable value. This is due to the fact that, with many of the high explosives, the explosive power is largely dependent upon the molecular state of the substance. A typical case is lead azide, $Pb(N_3O)^2$. When this exists in a very fine state of subdivision, it will withstand considerable shock before exploding; but as the size of the crystals increases, the sensitiveness to shock increases rapidly and it becomes a powerful explosive. Chemical analysis cannot well detect such a change, as both substances have the same chemical composition. The differences in its properties are the result not of a chemical difference, but of a physical difference, which can be observed under the microscope and thus an estimate be formed of the properties of the substance.

In the study of colloids and in the leather industry, micro-analysis is extensively used for the examination of the hides as they are brought to the tannery, and for the examination of the effect of various methods of treatment on the structure of the hide. In this way it is possible to determine the most suitable way of treating hides of various character and producing grades of leather adapted to different requirements.

Drawer for Darkroom-Bench

PERRY D. FRAZER

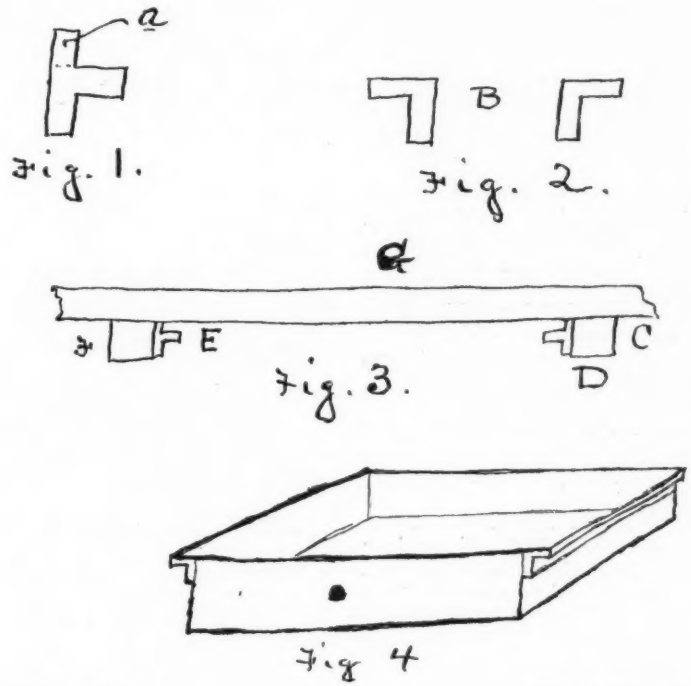
IN a darkroom where space is limited, or in a part of a darkroom where one works oftenest, one cannot have too many receptacles for various articles. And drawers under the work-bench are invaluable—as many as there is space for. Shelving with spaces for various articles is all right, and very useful; but if one is in the habit of keeping negatives or printing-paper on shelves, it is too easy to forget to cover them when one snaps on the white light. A drawer is different; for if it is in a place where one stands, or sits or moves about, one unconsciously closes it, if for no other reason, to get it out of one's way.

Drawers are useful, you must admit; but you may not be handy at carpentering, and making and hanging drawers may seem a problem. It isn't, if you follow the lazy man's line of least resistance. This is how it may be done by anyone who can drive nails and brads half-way true

At the lumber-yard purchase as much as you require of white pine stuff, cut as shown sectionally in Fig. 1. I don't recall the trade-name for it; but it is made to nail on to the casing of a window, to hold a wire-screen, the sides of the frame of which are grooved to fit.

In Fig. 3, G represents our bench. It is assumed that you have a wooden box of suitable size and shape. Cut two of the strips the length of box, then saw off one part (A, Fig. 1), leaving the strips as in B, Fig. 2. These are attached to outer top edges of box with small brads (see Fig. 4).

Saw two $\frac{7}{8}$ x $\frac{7}{8}$" pieces of pine into suitable lengths and attach one of the strips (Fig. 1) to one of them, then nail it (C) to under side of bench (D, Fig. 3). Prepare the second member (E–F), put the drawer in place, leaving one-eighth-inch play, and nail square strip (F) to



FIGURES 1 TO 4 PERRY D. FRAZER

bench. Attach a small knob or metal loop to the front, line with paper, and your drawer (Fig. 4) is complete. If it binds at top or sides, dress off with a plane. In order that it will slide freely in damp or dry weather, rub the bearing surfaces with paraffin or soap. Either one will be better than oil.

There are many light-weight boxes with locked corners available; and one of these is better than a nailed box, particularly if printing-paper is to be kept in it. If light shows through chinks, paste strips of black paper over them, then add paper lining, which is neatest if glued in place.

In my business I have need for large numbers of gummed labels of various patterns and shapes, and these are pesky things to keep, due to their tendency to stick together in the humid days of mid-summer; but I have found that if these labels are kept in tin boxes with tight covers, and all in a large metal container, they never stick together if an open box of fine soft-wood sawdust is kept with them. This is useful in a drawer containing plates, films, and paper, too. The fine sawdust will absorb a surprising quantity of moisture before other articles are affected, and thus save time and material.

Focusing Enlargements Accurately

EDWARD C. JONES

HAVING had a good deal of trouble in focusing enlargements in the past, I am enclosing three photographs showing an attachment which I recently added to my enlarging-lantern to eliminate this difficulty. I think, therefore, while you may not wish to publish these photographs, they may be of use to you in case some of your readers have had similar difficulties.

Figure 1 shows the complete lantern and stand which I designed in order to make the enlarger so that I could move it about from room to room, as I did not have place to keep it all the time in my darkroom.

Figures 2 and 3 show a more detailed view of the focusing-attachment. You will see from these that the knurled focusing-knob was removed and a small bevel gear with 36 teeth mounted in place of the knob. This gear is engaged by an 18-tooth bevel pinion, the shaft of which leads down to a knurled wheel for focusing. The shaft of the pinion passes through a tube which appears in the photograph to be a $\frac{1}{2}''$ rod, and the set-screw shown just above the focusing hand-wheel enables me to clamp the mechanism at that point. I can then reach up and tighten the other clamp, which is not shown in the photograph, as it is behind the lens-board; then by releasing the lower set-screw, the arm can be swung out of the way, as shown, so that it will not cast a shadow on the easel.

The whole object in this device is to enable the operator to have his eye at the best distance from the image while focusing; and I am sure that some of your readers at least will appreciate the advantage of such an arrangement.

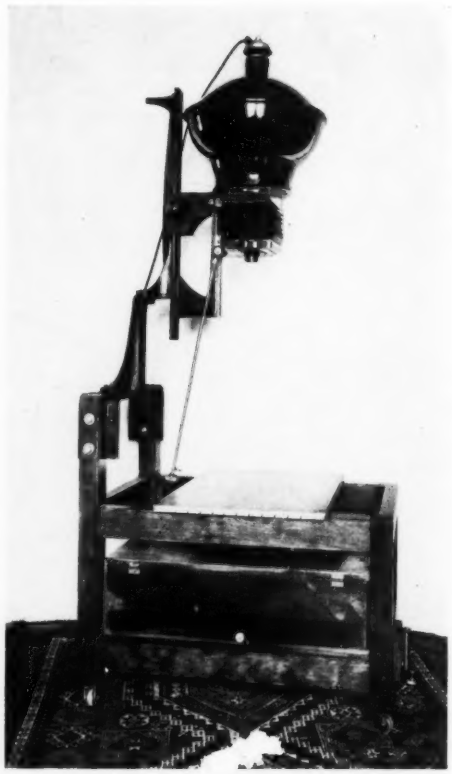


FIGURE 1 EDWARD C. JONES

FIGURE 2 EDWARD C. JONES

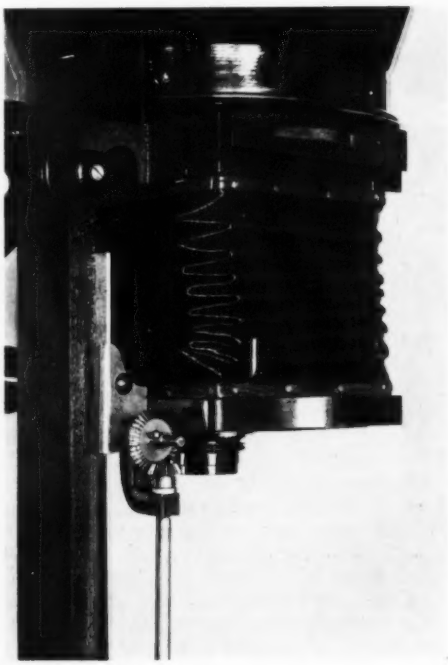


FIGURE 3 EDWARD C. JONES

The Inferiority Complex in Photography

C. E. PALMER

LIKE writing the first line of a poem, we find it convenient to strike a title as something on which to hang the hat. We mention this; for it is feared that in eyeing the title some of you may imagine the Editor to have been sufficiently lacking in a sense of proportion, and to have allowed another "psycho-maniac" to break into print with a discussion of complexes in quarters not appropriate. The visit of Dr. Adler, the discoverer of the famous "complex", to this country, merely suggests that, after all, his famous theory does have something to do with photography as an art in many ways. So this is the peg to hang these musings upon.

We shall illustrate with a little first-hand incident the analysis of which will be found to affect pictorial photography in several vital spots. Last summer we were making a series of oil-sketches on a Gloucester wharf when a young fellow with a camera approached rather diffidently and, seating himself near by, observed that he hoped he wasn't intruding but would enjoy watching the daubs being applied, as he was always interested in seeing how "real pictures" were made. He was assured that the pleasure was all ours; and, as for seeing how real pictures were made, it would be best to look the other way, meaning that the glorious profusion of the harbor, its abounding life and stir, and many odd nooks were better instruction than any performance of ours. However, he remarked that the brush had it "all over" the camera for ability to capture the pictorial idea; and the pity of it was that the camera he had was one of the finest compact European makes—a veritable studio, needing only a "man behind the gun". He talked of how the painter could leave out what was not desired, govern the lighting and atmospheric conditions to suit himself; but the photographer was forced to accept the subject as it was, or leave it in disgust. He talked of the color lacking in the photograph, the appeal of clever technique and a lot more, revealing that he was a young man of parts who was rather more misinformed than entirely ignorant. We fished a camera from our kit and inquired if he thought it was being toted for the pleasurable addition of its weight. As he seemed to be at leisure, he was invited to accompany us on a continuance of our ramble for the day. He was shown a few things the brush couldn't do, and when he boarded the train for Boston that evening the chap was convinced that every medium was possessed of limitations and that his camera was not the most overburdened by a long shot. We hope that young fellow has recovered from his "inferiority complex".

You may smile at that fellow's expense if you will; but his attitude is reflected painfully in many branches of pictorial photography that must be altered before the world at large will accept the art as seriously as the other recognised mediums of pictorial expression. Although he demonstrated a lack of appreciation of the finer advantages of the camera, yet, compared with many more advanced workers, his ignorance was one of degree rather than of kind.

The most striking manifestation of the complex appears to reside in the herding into "schools", wherein a multitude of mediocre followers attempt to imitate a few strong and individual workers. This is true of all the arts, to be sure; but it appears nowhere so conspicuously as in photography. The rabid attempts to rob the photograph of its own beauties in a mistaken effort to make it appear anything but a photograph are actually offensive to those who know photography. We have no criticism of those competent artists who know the values of the transfer methods for appropriate occasions; but for every print of this sort made with an intelligent appreciation of the added charms acquired, there are a thousand so done with no other reason than to disguise the inherent qualities of photography, just to seem more "arty" and insanely different.

Then again, we have the craving for "fuzzy" stuff, and that is the only name we can think proper. A real artist senses the value of diffusion for some very fitting occasion; but we are sickened with an avalanche of prints made with a multitude of "trick" lenses, by kicking the tripod, and—we actually believe—by "gumming" the lens with a greasy thumb!

We also have those crimes known as the "hand-painted" photograph, so evident in the "Art Departments" of our city shops. Shades of Cæsar! Was there ever a greater crime against the subtle beauties of monochrome, the very heart's blood of photography?

An artist with a sure knowledge and keen appreciation of the beauties and subtle shadings on an endlessly varied surface, and a skill in the handling of lines, creates a dignified and beautiful study of the human form; and an army of imitators swarm to the front with a pestilence

GOLDEN SUNLIGHT
W. A. WATSON
HONORABLE MENTION—MY HOME

of "nudes" that excites the resentment of the discriminating and causes the machinery of a crude and ignorant censorship to forthwith condemn the artistic and suggestive alike. This particular abuse has done as much to harm photography as it has painting. The large army of the uninitiated public has gained an impression that photographers and painters are an immoral crowd bent upon appeal to and exploitation of the least desirable traits in the race. It has furnished the material for an all too large number of "art" and "photographic" sheets that are not and never were patronised by artists worthy of the name.

Several painters and photographers of ability have devoted great care and skill to various types of still-life studies, producing many fine pictures; and the pseudo-artists run away with the suggestion, decorate the kitchen sink with an array of utensils, and proceed to shoot wildly, with results insulting to the dignity of the highly useful objects employed, not to speak of the patience of those who really know something about the laws of composition and the proprieties.

One might continue indefinitely to itemise these crimes against art. To be sure, other mediums are victims of the pseudo-performer, but we think only photography is hampered by the wild efforts to make the print appear anything but what it should; and here is the point of our argument.

All these things are but the confessions of an inferiority in pure photography as related to other mediums. The art is cursed, like many another good cause, by the wrong kind of "friends". It may be that many of these people are obtaining pleasure, and are content to follow crudely where they lack ability to create. With such we should have no quarrel; but we may expect those responsible for publicity in the craft and the conduct of exhibitions and competitions to insist upon artistic photography and not permit serious consideration of hybrid mediocrity.

That photography is inferior to any other medium of pictorial expression is an entirely ignorant assumption, insulting alike to some of the world's premier artists and to the steadily increasing number of discriminating art lovers who actually prefer the photograph, as others may oils, pastels, watercolors, or etchings. Like every other inferiority complex, this one, also, is based upon complete ignorance or half-knowledge of the factors involved.

Those who claim the photographic print to be lacking in color, and therefore second to the painter's canvas, thereby confess a complete inability to see or know color in its true sense. It requires a trained eye to *see* color, as it does a trained ear to catch all the tones and notes in music. Color resides in the varied pigments upon the palette only in a relative sense, and according to the skill of the painter in using one tint against another. The real color resides in the various degrees of light-contrast that can be suggested by the medium used, or tone-values, as they are called. Here, instead of the weakest, is the strongest feature of the photographic print; for the tireless eye of the camera can, with intelligent use, search out and render a subtlety of tones and shadings that for real color are the despair of fair-minded painters. The rich color of photography is in its seeming lack of color in the popular acceptance of the term. Monochrome is the test of every artist. Persons of average ability can render a fairly acceptable result with a large array of pigments or crayons; but it takes an artist to make a picture in black and white. It is the high privilege of photography to rest its claims alone on the supreme test of art—the truth of tonal values.

The impression that photography is inferior to other mediums, in that the photographer does not require the imaginative qualities of the painter or that the painter has the advantage in the ability to eliminate useless features in the subject, is equally unfounded, and a decided injustice to the artist photographer. The lens may supply the draughtsmanship which costs the painter years of close study; but even then the draughtsmanship cannot be correct without considerable technical skill being employed, and a skill usually as painfully acquired as is deftness with the pencil. The imaginative gifts of the photographer cannot be one whit less than those of any other artist. It could not possibly be less, as the inspiration required in the conception of any picture is identical in quality.

That the painter possesses an incalculable advantage in the elimination of detail and the wilful control of atmospheric and lighting-conditions is true only in a relative sense, and is rather an illusion evident only to the unthinking. The painter effects this control, to the unthinking, quite regardless of conditions prevailing at the time of working; while he is really combining the results of much observation, with the locality at the time of study serving as a graphic note and guide. He is combining his observations with appreciation of an appropriate feeling and the subject as it is, and transferring the result directly to paper or canvas. That he does this directly is only a deception to the uninitiated, who do not reflect that the photographer, in achieving artistic results, must do the same,

but in a less evident manner. Few fine photographs are made upon first sight. The photographer, too, must study the subject in all weathers and all lights, decide upon the conditions which, combined with his technical skill at the time of exposure, and subsequently in the darkroom, will give the rendition most favorable to his interpretation of the scene. A little reflection on this point will readily prove the sole difference to be one of methods peculiar to each craft, and not one of quality or degree.

Perhaps the chief "center of resistance" in this "inferiority complex" from which many photographers suffer, is based upon a decided misconception of the methods employed by the painter in discovering his subjects. Those unacquainted with painting are wont to believe that the artist fishes his subjects from an exhaustless well of superior imagination. Nothing could be farther from the truth. No matter how skilful the painter, or how apparently fanciful his product, he is compelled to resort to nature and life as it is, or he ceases to be an artist and becomes a mystic with no acceptance of the truths of nature, and so fails to produce pictures of any appeal to the world.

Sir Walter Scott, whose literary descriptions of nature were a marvel to his times, met the adulation of an admirer, who observed that his imagination must, indeed, be superhuman in order to produce so infinite a variety of description, by replying that no author could be so foolish as to trust to his own imagination when nature alone furnished such an exhaustless fund of material that it was only needed to describe what any ordinary eye could see all about. The process of discriminating selection is the source of all works true to nature; and that the products of this selection are any less superior when obtained by a lens is, indeed, a most apparent absurdity.

The two preceding paragraphs may appear inconsistent in view of the fact that we have admitted each medium to be possessed of its peculiar limitations. We do not wish to be thought claiming that the camera can be as successful as the brush in the same field. In fact, it is just those attempts to effect with the lens what the brush could do better that causes emphasis of the apparent inferiority of the lens, with which we so strenuously disagree. Many painters meet disaster in attempting what the lens could do better. Each has its distinct area of study, and it is the first requirement of the ambitious photographer to early sense those subjects best left to other mediums. It is not the purpose of this article to attempt any definition of the respective fields of study, however; the province of photography is too nearly inexhaustible to furnish excuse for any attempted invasion of the painter's domain.

The best way to cure the "inferiority complex" is to refrain from a desire for our neighbor's grapes and proceed to a more appreciative care of our own beautiful vine, which may grow and flourish in our own garden.

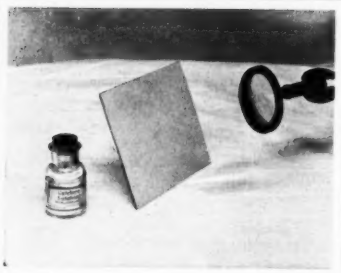
Chemical Laboratory-Clamps in Photography

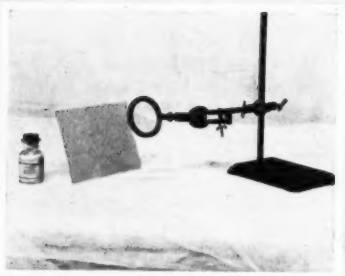
RAYMOND B. WAILES

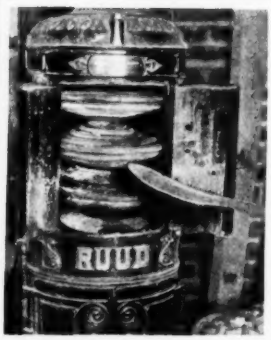
IN photography, grouping the items in the subject is an art in itself. Causing them to retain that fixed posture or position is another art. This is especially true in photographing industrial, technical, and scientific subjects. This can be readily found true by answering to yourself these few questions: How would you photograph a pair of scissors cutting a sheet of paper; *i.e.*, how would you support the scissors? How would you arrange a reading-lens to magnify the type of a printed page so that when photographed both the original and the enlarged type would show? How would you photograph a hammer about to strike a subject under conditions demanding a large depth of focus, or with the lens stopped way down, and under adverse light-conditions?

The writer has had satisfactory results in work along the lines stated, by using the iron burette and rings and clamps which are a part of all regular equipment of chemical laboratories. These clamps are made in many styles; and several of them can be so adjusted that objects can be held in any position which can be imagined.

Figure 1 shows a hammer about to strike a glass-object, a picture once needed by the writer. The light-and-film conditions were such that a two-minute exposure was necessary. It







FIGURES 1 TO 7

RAYMOND B. WAILES

can be seen from this that an assistant holding the hammer could not be used, as movement would be present. Figure 2 shows how the set-up was accomplished. Here an ordinary laboratory support consisting of ring-stand and a burette clamp are used to support the hammer, they, of course, not showing in the "original" photograph. These two items can be purchased from dealers in chemical apparatus.

On another occasion the writer needed the set-up as shown in Figure 3 to illustrate an article. This shows a magnifying-glass being held at its own focal length away from a chemcally treated card. Figure 4 shows how the whole looked to the man behind the camera. Of course the reader of the article saw only the photograph Figure 3. Here the same laboratory-support and burette clamp were used.

A 250-watt lamp mounted in a bright tin pan of 5-and-10-cent origin makes an ideal slap-stick but serviceable spot-lamp for photographic work. Just how a lamp of this portable type can be mounted to play upon any object, no matter where it is placed in the studio or room, is shown in Figure 5. Here a modified laboratory-clamp is used. Five separate movements of the reflector can be had with this arrangement; and, moreover, the clamps and ring-stand will hold the lamp tightly in that position.

Figure 6 shows another possibility of using these chemist's tools. A brush is shown clearing the dirt, ashes, soot, and particles of plaster from the coils of a water-heater to allow a more perfect conduction of heat through the copper-coil. The brush is held by a laboratory-support, as in the other illustrations, but not shown here.

The variety of clamps available is shown in Figure 7. One can clamp anything from a knitting-needle to a baseball-bat in them. The iron-supports can be had in different heights, the smallest being about twelve inches and the largest thirty-six inches.

Other uses will readily be found by the industrial photographer. Some of them are: Holding board reflectors to reflect light upon the subject. Holding the leaves of a book apart while copying-work is being done. Holding back draperies, curtains, and other hangings which are causing interference in the composition of a picture to be made.

Side-Road Profits

DALE R. VAN HORN

THIS business of making money with your camera isn't always that which involves home-portraits or a photo-finishing enterprise. We occasionally hear of the lucky individual who, for instance, went to a celebrity, got some informal pictures, and possibly sold one or more of them for a large sum of money.

"An exception", you say, "and not a common occurrence. *I* wouldn't have the chance to do that."

Maybe not; but instead of waiting for a chance like this, you can toss the camera into the back seat of the car and strike forth any day you choose, barring bad weather, to make as much, or more, and without the expenses of the more extensive excursions. In every town, hamlet, city, and community in the land there are ideas to be expressed photographically and traded for cheques. The going about it in the best way is the problem to solve.

Before proceeding further, let's cite a personal experience which happened three months ago. Although I make a good many pictures of this nature and in this way, frankly, it was one of the best trips ever taken, considering the time involved. An appointment with a man in Omaha, sixty miles away, on a Monday morning prompted me to start the day before at noon, because the sun was bright and I felt that a few lucky pictures might defray the costs of the trip. During the four hours of picture-making light that followed after the start, less than three rolls of film were used which, when figured up about a month ago, had brought in a total of $60.25—or about $57 clear profit. I purposely avoided the highway, because that had been traveled before, and also because experience has proved that one can "spot" ideas from side-roads more easily than from the roads which are main thoroughfares. This may be due to the fact that farm-buildings are usually placed closer to side-roads.

The first farmyard to yield anything was about ten miles out. Here I found that the owner had rigged up a small gasoline engine to run a generator salvaged from an old auto for $1. A picture of that brought $4 from a

technical magazine. During a talk with the farm-owner, the interesting fact of an outdoor shower-bath for the hired help in summer came out, and several pictures of this—three different views—resulted. One of these sold for $5. Still a third idea came to light just as I was leaving, and another exposure brought a further $4 check for a handy gasoline barrel-support, built into the windmill tower. So, you see, the first stop netted $13—all paid within a month.

Driving on farther, I spotted a large concrete storage water-tank in a farmyard. Concrete tanks are seldom worth photographing, and the files already hold several still unsold. Still, this looked promising, and I drove in. The owner came out, and we talked. It's a lucky thing he did, for me, because he told about a homemade sweet-clover harvester he had made. We drove over to the field and made four photographs—all different, of course. Later two of these pictures brought $20 from a national farm paper, and within a few days $7 came for the remaining two from a sectional farm paper, making $27 worth of cheques that came for four post-card prints and a few minutes of time. Please bear in mind that while the pictures were of the same object, there were eleven made from different angles, and the descriptions about them were written from different angles.

Later I saw a stack of what was, until two days before, good alfalfa; but it had caught fire by spontaneous combustion. That photograph brought a few dollars.

Reaching the edge of Omaha just as the shadows were lengthening, my route led past a home with an unusual garage connected with it. It had been built on a level with the street, but the home reposed upon an abrupt rise of ground. A photograph of this, with a sketch showing how the garage and home basement were connected, brought another cheque for $15. Two or three other pictures have already been sold, bringing the total to $60.25, as previously stated. The last tabulation was made a month ago, however, and two other pictures made on this same trip have been sold since then. The grand total will probably hit $70. The next morning I was on time for the appointment.

This theory of selling pictures, as you know, is to find the needs of various editors, then make and send them pictures which they are apt to purchase. Although the top price for excellent 8 by 10-inch pictures turned out by professional photographers is usually $3, you can generally get this much, and sometimes a great deal more, from small snapshots. I have, during the past nine years, sold probably more than 2,500 pictures, but few being larger than a postcard.

Several years ago, to prove that a high-priced camera and skilled experience are not necessary for the photographic-writer, I bought a second-hand postcard Brownie for $4. During the next two years this camera made $2,126.84 worth of pictures—that many have been sold to magazines—and the prints *averaged* $3.48 each!

The chief line of activity consists of perusing those magazines which appeal to your fancy. Find out what editors want. Then begin sending the editor pictures with suitable descriptions. If the rates are not high enough, cultivate another market. And always enclose postage for the return of those found unavailable.

Money-Saving Records in Photography

J. E. BULLARD

A GREAT many photographers use photographic material where they should use records instead. Exposure after exposure is made to obtain results that often could be had with one exposure, if records had been made and were studied.

The greatest progress and the best results always depend upon complete and accurate records. We have excellent proof of this in the case of the marvelous industrial and scientific progress that has taken place during the past few hundred years. The foundation of all this progress has been the making of complete and accurate records, correlating them, analysing them, and studying them. Without these records the same things would be done over and over again in the search for the best way to accomplish what it is desired to accomplish.

Just as industry has progressed, just as science has progressed because of complete and accurate records, so can the individual photographer do better work than he would otherwise be able to do if he will make and use records. One professional portrait photographer operating a number of studios has been able to reduce costs

VILLA SEREBELLONI
MARY CALLAGHAN
HONORABLE MENTION—MY HOME

and to raise the quality of the work done as well as to keep results more uniform by standardisation brought about through the use of records.

Experience alone is not reliable, for the reason that too often the vital things are overlooked. It is only when accurate records are made that causes of failures and causes of extraordinarily good results can be discovered, and it is made possible to repeat the good results at will.

Records that are needed in photographic work, if the best results are to be obtained and if time and material are not to be wasted, are the most detailed and complete records that can be made. After these records are made they must be used. This means that some method, some definite plan, should be adopted.

Of course, if one is merely making snapshots and is not aiming at the very best possible photographic effects, records are a waste of time. However, if he is really serious about his work, he will find records of incalculable value to him.

These records cannot be too detailed. One cannot tell in advance just which detail will have the greatest importance. Therefore, it is well to record everything.

When one exposes a negative, then, he may well make notes of the brand of plate or film used, the date the makers state it should be developed, the temperature of the day, the light, whether cloudy, fair, or sunshiny, how strong the wind, the time of day, and any other details that in any way might affect the picture. Of course, the day of the month, the month, and the year should also be noted. The lens used, the stop used, and the time of the exposure are also other items to record.

If forms are drawn up on sheets of paper or cards, a space being left for each item of data, then nothing will be forgotten at the time of exposure. If one is doing a good deal of photographic work, he might have these cards printed. On the other hand, he can duplicate them himself at comparatively small expense.

A form is drawn on a sheet of paper or bristol board, the size being considerably larger than the final form is to be. Headings for the spaces may be neatly lettered by hand; or if paper is used, the lettering may be done on a typewriter.

On this form we must have spaces for the date, time of day, weather, light, lens, stop, time of exposure, wind velocity, and the like. Have a space for everything that can possibly affect the results. Spaces should also be provided for the other steps to the finished print.

After the form is completed, it can be copied with the camera, and in the process the form be reduced to the size which will prove most convenient. Most of the data can be placed on a three-by-five-inch card; and if a liberal use is made of symbols, all the data desired can readily be recorded on such a card. This size of card has the advantage of being convenient to carry in the pocket and also of being of standard filing-size, so that filing-cases can be purchased in which the cards may be filed. Cards are better than books, for the reason that they make it easier to study cause and effect.

After the form has been copied on the negative, it is then just a matter of making prints on a mat surface printing-paper. Double-weight paper will usually serve the purpose best.

From the time of the exposure, on through the other processes, it is important to keep detailed reports. To avoid confusion it is well to number the negative and the record cards with the same numbers.

The date, the temperature of the darkroom, the developing formula used, the time of development, the time of washing, the time of drying, and any other details regarding the negative need to be recorded. Sometimes it may be well even to record the state of one's digestion. It may be found that when one's digestion is out of order, he does not obtain good results. So his physical condition may have some effect upon the quality of what he does. At any rate it is better to make the records too complete than to leave out anything.

Some results are likely to be poor and some bad, up to the point of the finished negative. If several different printing-processes are used, then a separate card-record will be required for each process; but if only one process is used, then the print-record may be made on the same card with the negative-record.

All the details in regard to the printing, of course, need to be recorded just as they were in regard to the negative. At first, these record-cards may prove of little value; but as they accumulate in number, their value increases.

For example, suppose that one has a hundred cards, one for each of a hundred negatives. Some of these negatives are good, some are fair, perhaps some are complete failures.

Suppose that ten of the negatives are especially good. Take the ten cards on which the records of these negatives have been recorded and compare the records. It will be found that there are certain details on these records that are alike for all ten negatives.

Now take the ten poorest negatives and compare their records. It will be found that certain of the details are the same for all ten.

It is obvious that in this way one can soon learn what is the real cause of failure and what leads to the greatest success. Instead of making

the same mistakes time after time, he is able to avoid even the smallest details that lead to poor results. It naturally follows, then, that the results not only will grow better and better but that they will be far more certain. There will be a uniform high quality it would be difficult, if not impossible, to attain without the use of such records.

Because such comparisons of the records as have been mentioned are so important, it can be seen why card-records rather than records in a book are better for the purpose. It is hard to make these comparisons when the records are on different pages of a book; but it is easy to sort out the cards and lay them out together so that they can all be seen at once.

An accumulation of a few hundred cards will show what plates prove the best for the work one is doing. They will show whether plates or films will give the best results, if the records are fairly evenly divided between plates and films. If a few different developer formulæ have been used, the one that had proved most effective will be shown by the results compared with the records. The information in regard to the most suitable paper, the process of printing that proves best, and all other details will be shown. There will be no guess-work. It is a case of working with facts and not with memory or opinion.

If one has been making photographs for a number of years and has never used records, he will be surprised at the progress he makes when he begins to use and to study records. He will find that fewer negatives are spoiled. He saves a really worth-while amount on material. He also saves time, and he is not subjected to as many disappointments.

All the card-records should be filed away in an orderly fashion, so that any desired card may be found at once. If the negatives are kept in negative-albums or in individual envelopes and filed also in an orderly fashion, and all prints, negatives, and record-cards are so numbered that errors cannot be made, then the record-system becomes still more effective.

There are two good ways of filing. One is to divide the negatives into classes and number each negative under each class. The other is to file all negatives numerically. Each card should have on it the negative-number, and the cards may well be filed in exactly the same manner the negatives are filed. Each print should also bear the negative number, and also a print-number if a separate print-record is being kept. The print-record card naturally will bear the number of the print.

There are a few more data that may well go onto the cards. These consist of the time and the material each subject has cost, and, if one sells any prints or negatives, the prices received for them. Every item of cost should be considered, and a liberal price allowed for one's time. This record will help prevent selling any prints at less than cost and thus save the photographer money that he might lose if he only guessed at the cost rather than knew from actual records what that cost has actually been.

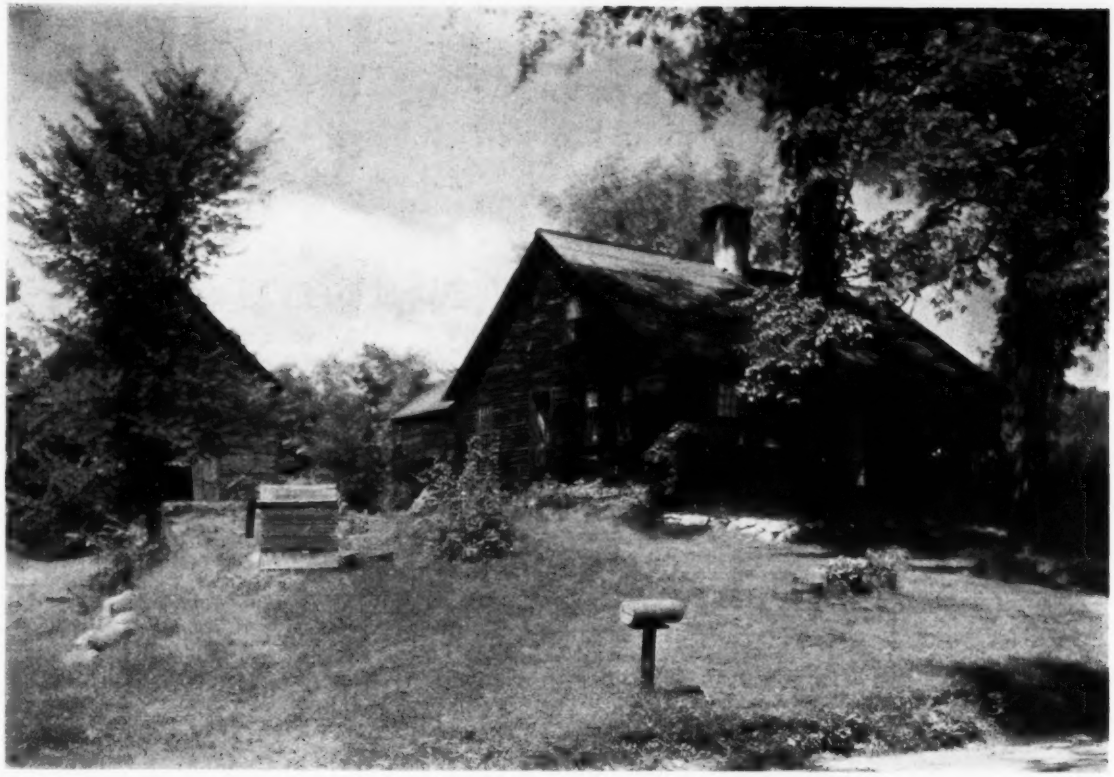
Which Helps the Most?

A. H. BEARDSLEY

FOR the past few years it has been interesting to study the reaction of the average amateur photographer when he visits a salon or exhibition of photography. It matters not whether it be the Pittsburgh Salon or the exhibition of a one-man show at the local camera club, there is always a marked reaction which seems to express itself in two ways. One is that such an exhibition tends to discourage rather than stimulate the beholder; the other is that the display of exceptionally beautiful and very artistic prints serves as a splendid objective to reach, if one can.

In one case, the average amateur studies the work of acknowledged leaders in pictorial photography and admires it, but throws up his hands in despair at ever being able to equal the work of the exhibitor. Often this results in giving up photography altogether. In the other case, the observer studies the pictures and forthwith resolves to go and do likewise as closely as possible. Usually, those in class number one far outnumber those in class number two.

The question of immediate interest is whether our exhibitions should be so selected and presented as to catch and hold the interest of the large number of average amateur photographers, or whether we should confine ourselves only to those who by training and study can fully appreciate and understand the ultra-artistic work of famous pictorialists. Which form of salon or exhibition really helps the average amateur photographer the most?



WHERE GOLDEN MEMORIES CLING

HONORABLE MENTION—MY HOME

GEORGE W. FRENCH

EDITORIAL

No Real Black in Nature

ONE frequently hears of black in nature. In order to portray such an hypothetical condition, some writers use the term "coal-black". Now let the intelligent reader scrutinise the coal as it has been heaped upon the sidewalk by the coal man; it presents a mass extremely dark in color. The term color is used here to suggest the condition of the mass as it appears to the normal human eye. Whether the sun shines upon it, or whether it is seen by diffused daylight, a sort of bluish tinge may be observed to emanate from it. A consideration of this subject by readers interested in the study of color would seem to be in order. Undoubtedly many readers of the investigating sort have already found this topic of intriguing interest, and many of us should be glad to learn the result of their findings. Of "black", Practical Standard Dictionary says: "Having little or no power to reflect light; absorbent of or without light; hence, of the darkest color known: of the color of jet. An absolutely black body is unknown in nature, though assumed in some theoretical investigations in physics. Ordinary black bodies reflect all the colors of the spectrum equally, but slightly, and hence are really of a very dark shade of gray. The name is colloquially given also to bodies that show selective absorption, as very dark greens, blues, and browns". When one hears black referred to as a color, one should not be too quick to accept such a statement as a scientific fact.

Photographing Historical Places

TO visit some famous historic locality out of the beaten path—such as Charleston, S.C., perhaps—must appeal strongly to the camerist in search of the unusual. Take, for instance, a little-visited place like St. Augustine, Fla., formerly a popular winter-resort for people from the North. Even today it cannot fail to impress quite delightfully the camerist to whom the place is new. Here is an historic city founded by the Spaniards in 1565. It is virtually intact, and, with its old streets and houses, must present the same picturesque appearance as it did 360 years ago. It was ceded by Spain to the United States of America in 1821, and is the oldest European settlement in the United States. What a wealth of camera-material for the ambitious pictorialist! He can dip his pen into historic lore and write his story with delectable gusto. His every word and picture will appeal to the reader thus favored. Furthermore, there is nothing to prevent the camerist from giving his personal impressions, both by word and picture, of a place virtually new to readers of PHOTO-ERA MAGAZINE, if not, indeed, to many others. And the alert picture-maker need not think that St. Augustine, with all its charm, is the only historic American city worthy of his discriminating quest. There are others possibly within easier reach. If of an insistently inquiring disposition, our camerist may find some locality, perhaps in his own State, which possesses an early history dating back farther than even the oldest settler can remember. Here, too, is a fascinating opportunity to study and photograph ancient landmarks, and other evidences of very, very old history of which the place could boast, but of which there is no record. One is inclined to envy the camerist who is sufficiently interested to undertake the pleasant task of securing pictures which would greatly help to form a local history. And, perhaps, he might be sufficiently qualified to perform the entire task single-handed and become the exclusive historian of the town. This should be a source of intense personal satisfaction, to the performance of which many a worker might wish to aspire. What better opportunity for such a worker to make his camera pay, provided that he have the required inclination? Unconsciously he may reveal marked pictorial possibilities that breathe the spirit of originality. The locality which he controls may thus attract pictorialists who are in search of regions as yet unexplored by the enterprising picture-maker; and who knows but that an opportunity to dispose of the property to someone who appreciates its potential commercial value, may present itself at any moment!

There are many small but attractive villages or towns in all parts of the United States and Canada where the artistic and financial opportunities for a qualified pictorial photographer are virtually unlimited. Many of our readers now live in such communities. We hope that they are making the most of their exceptional opportunities.

ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $10.00.
Second Prize: Value $5.00.
Third Prize: Value $3.00.

Honorable Mention: (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers,* will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded will receive a neat silver cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones,* go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs, and to responsible organisations for exhibition-purposes, *free of cost.*

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately,* giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

Photo-Era Prize Cup

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelvemonth become ineligible to receive prize cups in this competition for *one* year thereafter.

AWARDS—ADVANCED COMPETITION

Subject—MY HOME

Closed January 31, 1928

First Prize . . . . . H. P. Herron
Second Prize . . . . . G. P. Wright
Third Prize . . . . . Frank Reeves

Honorable Mention: Mary Callaghan; L. J. Creegan; Geo. W. Davis, Jr.; C. Frankenberger; G. W. French; Mrs. Mary E. Howe; U. Stephen Johnson; C. M. Johnston; L. H. Longwell; Dr. B. J. Ochsner; W. A. Watson.

Photo

THE OLD HOME
H. P. HERRON
FIRST PRIZE—MY HOME

Second Prize

ADVANCED
COMPETITION

MY HOME

"BE IT EVER SO HUMBLE"

GEORGE P. WRIGHT

Third Prize

ADVANCED
COMPETITION

MY HOME

AN EARLY HOME

FRANK REEVES

SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS

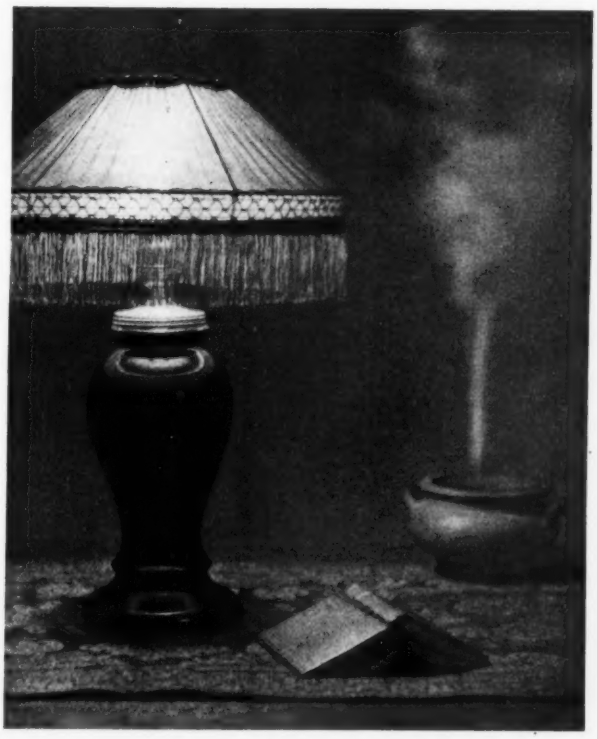
Subjects for Competition—1928

"My Home." Closes January 31.
"Portraits." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Architectural Subjects." Closes June 30.
"Pictures of Children." Closes July 31.
"Landscapes." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Animal Pictures." Closes October 31.
"Water-Scenes." Closes November 30.
"Vacation-Pictures." Closes December 31.

Artificial Light Photographs

No matter how skilled a photographer may be in the matter of making landscapes, marines, or outdoor-genres, he is very apt to question his ability to make pictures by artificial light. His attitude in the matter is largely the result of unfamiliarity with the treatment of such subjects and the use of artificial light-equipment. This competition is purposely included to stimulate our readers to find out something about making artificial-light exposures and to learn how to manipulate some of the modern equipment now offered to amateur and professional photographers. So far as the competition is concerned, it matters not whether the exposure is made by oil-lamp, electric light, flashlight, incandescent or arc-light. The important thing is that artificial light must be the principal source of illumination. Subjects may be selected from among relatives, friends, business associates, home-interiors, still-life, and exterior night-pictures—all of which will supply excellent subject-material.

A. H. Beardsley.



THE MODERN ALADDIN'S LAMP — WM. O. YATES
EXAMPLE OF INTERPRETATION

BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $7.50.
Second Prize: Value $3.50.

Honorable Mention: (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers*, will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded, will receive a neat silver-cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the half-tone plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right angles to each other.

PHOTO-ERA MAGAZINE
The American Journal of Photography
Wolfeboro, New Hampshire, U. S. A.
THIS is to certify that an Award of PRIZE
is hereby given to the picture entitled
entered by
in the PHOTO-ERA MAGAZINE Monthly Competition
which closed 192
Editor

PRIZE-WINNERS' CERTIFICATE

PHOTO-ERA MAGAZINE
The American Journal of Photography
Wolfeboro, New Hampshire, U. S. A.
THIS is to certify that an Award of *Honorable Mention*
is hereby given to the picture entitled
entered by
in the PHOTO-ERA MAGAZINE Monthly Competition
which closed 192
Editor

HONORABLE MENTION CERTIFICATE

AWARDS—BEGINNERS' COMPETITION

Subject—MISCELLANEOUS

Closed January 31, 1928

First Prize . . . . . Caroline Goldstein
Second Prize . . . . . Helen E. Miller

Honorable Mention: Edward Alenius; Ralph F. Blood; A. W. Clark; J. Daniels; Andrew Groven; D. H. Hamly; LeRoy Makepeace; A. G. Niido; E. W. Porter, Jr.; Ida W. Pritchett; Malcolm M. Rorty.

First Prize

BEGINNERS'
COMPETITION

MISCELLANEOUS

COURTYARD—BUDAPEST CAROLINE GOLDSTEIN

SHADOWS ON THE WALL HELEN E. MILLER

Second Prize

BEGINNERS'
COMPETITION

MISCELLANEOUS

EXPOSURE-MAKERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Exposure-Makers' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $5.00.
Second Prize: Value $2.00.

Honorable Mention (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers,* will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded, will receive a neat silver-cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the half-tone plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones,* go to the maker.

Entries are not eligible to Trophy Cup Contest.

Rules

1. This competition is open *only* to amateur photographers who for lack of time or equipment *cannot do their own photo-finishing.* Each contestant must compose his own picture and make the exposure without aid from friend or professional.

2. The name of the photo-finisher must appear on each print submitted. It will be printed under each prize-winning or Honorable Mention picture published.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations.

6. Each print entered must bear the maker's and photo-finisher's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately,* giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, and exposure. Enclose return-postage in this letter. Data-blanks sent at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right angles to each other.

PHOTO-ERA MAGAZINE
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entered by

in the PHOTO-ERA MAGAZINE Monthly Competition

which closed 192.

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PHOTO-ERA MAGAZINE
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in the PHOTO-ERA MAGAZINE Monthly Competition

which closed. 192

Editor

HONORABLE MENTION CERTIFICATE

AWARDS—EXPOSURE-MAKERS' COMPETITION
Subject—MISCELLANEOUS
Closed January 31, 1928

First Prize . . . . . Bessie Wood
Second prize . . . . . James G. Johnson

Honorable Mention: Geo. B. Davis; Katharine Matthies; Maurice J. Page; Lois Snelling; Mrs. Franklin G. Wixson. Marvin Wurts

RIDERS OF THE RIM — BESSIE WOOD

First Prize—EXPOSURE-MAKERS' COMPETITION

Photo-finished by

F. E. Colwell & Co., Albany, N.Y.

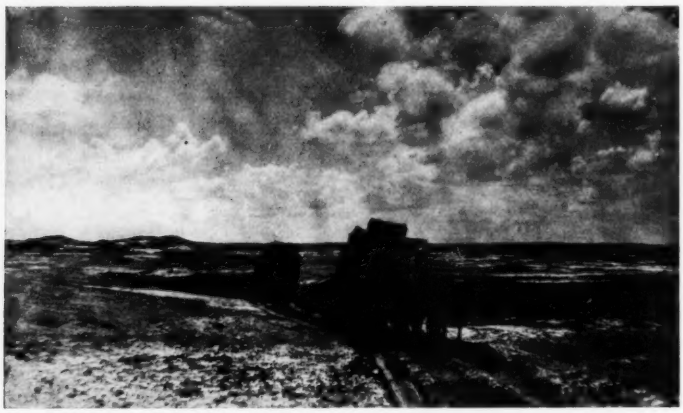
THE STUDENT CHEMISTS — JAMES G. JOHNSON

Second Prize—EXPOSURE-MAKERS' COMPETITION

Photo-finished by

H. C. Kinsman, Williamstown, Mass.

OUR CONTRIBUTING CRITICS



SUNSET ON THE PAMPA — PHILIP O. WESTON

THE PICTURE CRITICISED THIS MONTH

Data: Made in Atocoma Desert, Chile; February 21, 1927; 4 p.m.; Kodak No. A; R. R. lens; at F/8; 1/25 seconds; dry-plate; elon-hydro, tray-method; 6 minutes; print, Azo Semi-Mat; elon-hydro.

***Whoever sends the best criticism** (not over 200 words) **before the last day of the current month, will receive from us a three-month subscription to** PHOTO-ERA MAGAZINE.*

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

Seven Criteria for Critics

(1) Background and Sky. (2) Foreground and Figures. (3) Main Interest vs. *Distraction. (4) Gradations and Tone Values. (5) Lines and Masses. (6) Atmosphere and Interpretation, and (7) Photographic Technique.*

EVIDENTLY the clouds prompted the making of the exposure. A worthy subject, but none the less difficult to record in connection with objects in the foreground.

The horizon-line too nearly divides the print into equal parts. The loaded wagons are too near the center, with the load cutting the horizon-line.

If the sky was the major feature, then more of it should be shown; but a portion of the road must be seen in front of the team to avoid the impression that they will fall out of the picture. This could be accomplished by making the picture farther away from the team—show as much road as is now used and increase the sky-area. To have made the picture with the camera stationed slightly farther to the left would have brought the curving road, that may be faintly seen in the picture, a little nearer the center.

The exposure was much too short, and the developing-time seems long. Shooting against the light requires more exposure to obtain detail, which was completely lost by the short exposure and forced development.

The portion of the sky near the horizon at the left is too light, and leads the eye out of the picture. The light sand-streak just in front of the second wagon also leads to the left.

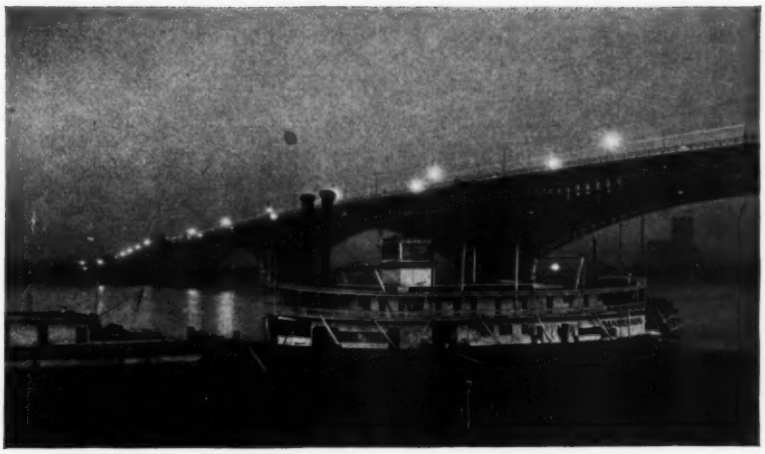
The name is misleading; the shadows are far too short to be sundown.

I am sure the scene Mr. Weston saw was inspiring—the curving rutted road, the wagons, and a sky crammed with billowy clouds—possibilities for a real picture; but the print fails to convey the beauties.

FRANK REEVES.

So often do we hear or read criticisms of pictures in which failure to introduce some human touch is stressed as a fault, that perhaps there are some who believe it is a fundamental requirement of pictorial photography. Maybe, or maybe not. In this picture the wheel-tracks were sufficient sop to the vanity of man. Undoubtedly the introduction of the wagons and teams detracts materially from the picture. Their silhouettes are not distinctive enough to identify them readily. The treatment and lack of detail disqualify them as principal points of interest. They occupy too much space and too strong a position to be disregarded. This is the chief fault.

The sky is magnificent. Ordinarily, one would not associate clouds apparently so heavy with the aridity of a desert. The effect of distance is well rendered by the position of the horizon. Those of us who are



NIGHT-TIME ON THE LEVEE — PAUL L. MILLER

YOUR CRITICISM IS INVITED

Data: Made from wharf, St. Louis, Mo.; Eads Bridge; June, 1925; about 8 p.m.; no moonlight; Folding Brownie No. 2-C; 5½-inch Single Achromatic Lens; stop 2; 20 minutes; Eastman Roll-Film; pyro; tank-developer; enlarged on P. M. C. No. 8; Nepera Solution.

familiar with our own Great American Desert will appreciate how well this picture renders the limitless bare and monotonous wastes of a desert.

B. H. JACOBS.

FOREIGN pictures are always interesting, and this one is particularly so. It has no doubt suffered to a certain extent through reproduction. The original print was probably much better than the half-tone. One must always make allowance for this when criticising a picture.

The sky adds in no small measure to Mr. Weston's interpretation of the subject. Oh, that we had a color-process that we could use for a subject like this! I mean one that could be handled with the same ease as we now experience in making monotones.

The two teams are rather indistinct; but this is to be expected when we consider the subject. They occupy too central a position in the composition; but if the print is trimmed slightly on the right, it will offset this fault. The hills in the distance add to the topographic interest.

There is a proper suggestion of atmosphere, and the technique is very satisfactory.

To my way of thinking, there is little in this picture to criticise and much to commend. Considering the subject, time of day, physical features, etc., we feel satisfied that Mr. Weston handled the job very well.

It requires an enlargement to get the best out of a subject of this type. ARTHUR H. FARROW.

STRANGE as it may seem, there is a wonderful charm in a desert pure and simple. There is a vastness, a primitiveness, a solitude that is very impressive—enormous spaces, absence of human activities; one feels almost as if one were alone with God—or the Devil, as the case may be. Therein lies its charm. An inhabited desert is a contradiction of terms. A couple of teams in a picture of a desert might possibly be allowable to emphasise the desertness of a desert, provided they were quite clear but inconspicuous.

Hence in this picture of a desert there is a serious artistic error in introducing into the foreground two very large and conspicuous freight-teams. If you want to show the desert, there is too much team and not enough desert. If you want to show the teams, there is too much desert. Strictly speaking, this is not a "pampa" scene. Pampa in South America is equivalent to our "prairie".

Hence a more effective desert-picture would have been shown had the two teams been eliminated, or at least put in a less conspicuous position. The photographer was aiming to give the sky-effect, and naturally the teams were under-exposed. I presume they are headed for the coast and are conveying borax or nitrates. The photographer presumably was very much impressed with the splendor of the scene, and ran ahead and made a picture. If he had waited until the team went by, and had then made a picture, the result would have been better. He might have avoided that bare patch on the lower left side, and those two probably extinct volcanoes in the left background would have nicely balanced the opposite cloud-masses.

However, I appreciate the difficulties under which he must have worked in that barren waterless region, far from civilisation, and doubtless the sunset was gorgeous in its coloring. A fellow that has ever been through any such experiences ought not to be too critical about artistic effects achieved on the desert to Atacama! *Macte virtute, puer!*

E. L. C. MORSE.

WHEN looking at this picture, one can almost feel the barren vastness of the arid desert, with the combination of rumbling wagons, the clatter of the harness, and the horses' hoofs whisking through the sand. The desert atmosphere and the wide-open spaces could

(*Continued on page 233*)

OUR ILLUSTRATIONS

WILFRED A. FRENCH, Ph.D.

A MERE glance at the frontispiece convinces the student in composition that here he has a picture that leaves nothing to be desired. It is complete in its portrayal of beauty and artistic expression. To be sure, there is apt to be a hypercritical soul who would prefer less foreground and less sky, and who wishes that the craft could have been snapped before it reached the exact middle of the picture. But we, for one, are quite willing to forgive these evident shortcomings and, doubtless, with many others, lose ourselves in the contemplation of a picture of real beauty.

Mr. Moore apparently was so captivated by the animated harbor-scene, at Southampton, that it did not occur to him to wait until the tug in the foreground had passed the picture-limits. We congratulate him in having captured so interesting a scene.

If the leader of the caravan, page 195, had been previously instructed by Mr. Moore, he would have turned the head of his horse, if not both rider and horse, so as to face the camera. However, one cannot but be satisfied with the present result.

Mr. Moore has given a pleasing title to the head of the little boy, and we are glad that he did not require the photographer's usual injunction, "Look pleasant, please!" Technically, the result is above criticism.

The types shown on pages 197 and 199 afford an excellent idea of what the traveler may expect to behold in Northern Africa, along the Nile, and in Asia. To omit or to subdue the white costumes of the natives, in the region of the Sphynx, for instance, is unthinkable. Of course, the photographer cannot control the prosaic, unprepossessing costumes of the travelers. As a piece of composition, Mr. Moore has again distinguished himself; and this is also true of "Himalayan Snows", page 201.

Viewed at a distance, the Tory mansion, page 205, appears to be confusing; but a close inspection reveals the beauty of light and shadow, so artistically expressed by the camerist, Mr. Creegan.

Data: "Aged and Stately"; made at Concord, Mass., August, 3 P.M.; bright light; Ica-Trona 3¼ x 4¼; Carl Zeiss F/4.5 Tessar, 5¼ focal length; no filter; 1 second exposure at F/8; Agfa film-pack; Rodinal; enlarged on Wellington Cream Crayon Rough.

Mr. Jones's illustrations, pages 208 and 209, are excellent examples of technical photography. No data.

"Golden Sunlight", page 211, is truly Japanesque in beauty and simplicity of artistic expression. It is, one might say, a symphony in light and shade, and superb in artistic arrangement. The window at the right serves its mission as a firm and obviously successful balance in a noble composition.

Data: "Golden Sunlight"; T. P. Ruby Reflex; 5¾-inch Anastigmat; Cooke lens; 1/10 second, F/4.5; made toward evening on a bright day; Wellington anti-screen plate; enlargement on Wellington Cream Chamois; M. Q. developer.

"Villa Serebelloni" is expressive of the quiet beauty typical of the Italian lakes, which are very popular. They are never neglected by the traveler who is fond of natural beauty suggestive of *dolce far niente*.

Data: Villa Serebelloni; Lake Como; Kodak; 3¼ x 4¼; R.R. lens; 5-inch focal length; U. S. 32; no color-screen; made in June, 10 A.M., bright sun; 1/25 second; pyro developer; printed on Wellington paper.

To judge from the title accompanying the picture by George W. French, page 220, the picturesque old farm-house is undoubtedly the birthplace of the photographer. And proud may he be of so attractive an ancestral home! How many times, maybe, have its former occupants strolled to the near-by letter-box to forward their messages! The discriminating observer views with satisfaction the easy arrangement of the salient features of the picture.

Data: "Where Golden Memories Cling"; made in Parsonsfield, Maine; August, 1927; about 10 A.M., bright sunlight; Seneca 5 x 7 camera; Goerz lens, F/6.3; 9-inch focal length; Eastman Panchromatic film with K-2 screen; stop, F/8; ½-second; pyro-metol developer; print on Azo H, Buff Carbon No. 1.

Advanced Competition

THAT fond memories cling to the old homestead, by H. P. Herron, on page 223, is doubtless the *raison d'être* of the picture. In viewing it, one seems to feel that the artist was deeply impressed by the sentiment, together with the beauty of the subject. As he now views the picture at his ease, he doubtless wishes that he had selected a more favorable time of day to make the exposure. It is easy to perceive what a beautiful effect in lighting could have been produced. Furthermore, by placing his camera farther to the right, the photographer could have obtained a greater separation between gate-posts and pillars. On the whole, however, the effect is rather pleasing.

Data: "The Old Home"; made in Hudson, Ohio, in September, about 2.30 P.M.; Graflex camera, Agfa film-pack; Verito lens; 1/25 second; Velours Black paper; pyro elon developer.

"Be it ever so humble", page 224, should make a personal appeal to everyone who views this picture; and the song "Home, Sweet Home", should fittingly apply in this instance. That the picture fills the eye is unmistakable. Technically, it is purposely not perfect; for it was the artist's idea to so treat the setting that it would give greater prominence to the cottage. One should not fail to notice the little dog in the foreground, which adds a touch of homelike interest.

Data: "Be it ever so humble"; made in Brown County, Indiana; Korona camera, 4 x 5; Verito lens; focal length, 8¾ inches; stop, F/4; K-2 color-screen; made in June, 7 A.M.; light good; Cramer Iso D.C.; Rodinal; Ansco Contest paper.

"An Early Home", on the same page, takes one far afield, apparently away from civilisation, into the Indian reservation, Fort Worth, Tex. The artist could not have chosen a more favorable day, with the smiling sun and fleecy clouds. The picture is well knit together and superbly balanced.

Data: "An Early Home"; made in Jennings, Fort Worth, Tex.; September, bright light; Eastman portrait film; B. & L. Tessar, F/11; 1/75 second; tray-developed with metol and Hydroquinone; print on Eastman bromide.

Beginners' Competition

THE discriminating artist, Caroline Goldstein, presents a peep into a typical courtyard in Budapest, Hungary. Needless to say, occupants of the home appear to be indifferent to the invading camerist, who showed excellent taste and judgment in making the exposure. The picture is admirably composed and balanced, and the artist made excellent use of the favorable lighting that existed at the time.

Data: "Courtyard, Budapest"; made on September 2, 1926, 3 P.M.; bright sun; Kodak roll-film; Kodak 3-A camera; Anastigmat lens, F/16; 1/25 second; M. Q. developer for film; printed on Fresson paper in manner of Fresson process, and developed with Fresson developer.

The play of light and shade in "Shadows on the Wall", page 227, in the picture portraying a Spanish home at Granada, Spain, is intriguing, and holds the attention of the beholder. The workmanship leaves nothing to be desired.

Data: "Shadows on the Wall"; made in Granada, Spain; August, 5 P.M.; light, sunny; Kodak, 2¼ x 4¼; Anastigmat lens used at F/11; 1/25 second; Kodak roll-film; Metol-hydroquinone; P. M. C. paper.

Exposure-Makers' Competition

THE line of horsemen silhouetted against the sky, page 229, deserves no comment from the editors, for reasons stated by them when this competition was begun. Consequently, we must not comment too severely on "The Riders of the Rim", photographed by Bessie Wood. It is difficult to state whether the development was carried as far as need be, in order to heighten the silhouetted effect. Purposely or otherwise, the space allotted to the foreground, as well as the sky, appears to be adequate.

Data: "The Riders of the Rim"; made in New Mexico, July, 1927; photographed at sundown, light not especially bright; 5 x 7 Eastman Kodak cut-film; Korona III; Anastigmat lens, F/6.3; Betax shutter, (10-inch bellows); stop F/8; 1/10 second. With photographers 90 miles away on one side, and 100 miles on the other, with a new, unfamiliar camera, and this only the second attempt at a silhouette, the enclosed picture is the result. Photo-finished by F. E. Colwell & Co., Albany, N.Y.

"The Student-Chemists", on page 229, which takes second place in the Exposure-Makers' Competition, is technically satisfactory, although the lighting is somewhat strong on the three figures.

Data: "The Student-Chemists"; made at Williamstown, Mass., in December; Ica Reflex camera; Carl Zeiss F/4.5 lens; Agfa film-pack; 1/15 second at F/5.6, with ten-times Zeiss filter; bright sun behind clouds in front of the camera; photo-finished by H. L. Kinsman, Williamstown, Mass.

Our Contributing Critics

(*Continued from page 231*)

not be portrayed better, I believe, taking into consideration the technical difficulties involved.

There is a suspicion of under-exposure. One doubts that the scene was as dark as the print would have us believe. For one thing the shadows are not long enough for the sunset-hour, and the lighting of the scene does not seem to harmonise with the spirit of the occasion as it appears overhead, explaining the presence of the short shadows, lighted clouds and the highlights on the sand. There is too great a range between the light on the left and the black masses of the teams. It seems as if it had been over-printed to give the impression of a sunset scene.

Part of the left could be trimmed to advantage. This picture unfortunately does not successfully portray the spirit attending the tired drivers hurrying their horses homeward in the fast-disappearing shadows, with the desert air growing more chilly every minute.

JAMES A. BELL.

Ye Editor Visits a Friend

THE Friend speaks!—Say Hartman, you belong to the Kodak Club—I want to show you some snaps I took with my Kodak last summer. We went down to Chippewa Lake—me and the wife—got some relatives camping down there—took one of them "two way" Brownies along. We had a swell time—took a lot of pictures that I know you'll like. Here they are.

Now this is—let me see—I ought to label them—that's a view of some trees—no, no—I had it upside down—that's the wife in her bathing suit—see? Her head is kind of fuzzy—looks like leaves—but outside of that it looks just like her.

That's Jess Peck from Wooster. He's a swell-looking fellow—on the police force—all the girls like him. That's *not* his face—that's his badge. He's got swell eyes but you can't see them because he is squinting so.

That picture you got now is the lake on a calm day—yes—I know it's only a straight line—but that's just how it looked when I took it—cameras don't lie.

Now this one is a joke—it's my cousin Biancus with his girl's hat on—ain't it a scream? Yes—I know I moved the camera, but I couldn't help it—I was laughing so hard. Well, yes, I guess you *do* have to know him to see the joke—no—it don't—it don't look any more like a horse's tail than I do.

This picture I can't make out—see—there's a swell sailboat and there's my brother Jake. See, there's his face—down in the water—under the boat—and Jake can't swim a stroke! The man that printed this said it was a *double* exposure, but I'm sure he meant *under* exposure 'cause Jake's exposed *under* the boat—these drugstore guys don't know it all, either. The fellow who sold me the "two way" Brownie said I should "follow directions"—I told him he wasn't selling me pills.

Now this—this is our machine—our new Ford—it's kind of blurred. I told the wife to stop the engine, but she thought it would look better in the picture if it was running.

This is little Bernice swinging—no—she's not in the picture. That's the ropes to the swing *there* and she's on *that end*. That? That's the wife pushing her—you can just see her stomach.

What—must you go so soon? So sorry! I have a lot more to show you—some swell sunsets and night scenes and one that looks like it is raining. Come again—won't you? So long, Hartman!

Thru The Darkroom Door.

An Avian Tale

A LITTLE youngster of three was taking a motor ride into the country with his "daddy", and was very much interested in the birds which he saw. On being informed that the red-headed bird was a woodpecker, he asked if it pecked wood. His father told him that it did. In a short time he was told that the bird flying overhead was a barn-swallow. He looked puzzled, then said, confidently and to himself: "Oh, I s'pose it eats barns."

Contact.

ON THE GROUNDGLASS

WILFRED A. FRENCH, Ph.D.

The Origin of the Madonna of the Chair

RAPHAEL's famous painting, "The Sistine Madonna", the gem of the Dresden Art Gallery, toward which visitors hurry the moment they enter the famous edifice, has been the subject of many an illuminating article in PHOTO-ERA MAGAZINE, serving as a model of pictorial composition, artistic and spiritual expression, and unity of design. There is probably not one of our readers who has had the rare privilege of enjoying this noble masterpiece but has carried away with him an exalted opinion of Raphael's creative genius, and has felt the better for having gazed upon this glorious work of art. What model or models Raphael must have had to aid him in the expression of his inspiration! And yet we must not forget the ease and spontaneity with which the great master generally approached his work. The incentive was not always the lucrative reward that awaited him. The suggestion to paint was nearly always spontaneous. Sometimes it was the result of an unforeseen circumstance. According to the story, Raphael, on one of his journeys—no, they had no automobiles in those days—was suddenly overcome by the necessity to satisfy the inner man. When he and his companions came to an inn, they halted and had a short interview with the inn-keeper. This resulted in the latter's providing some succulent viands for his famished guest. The starving Raphael fell to, and soon was seen to wear a happy, satisfied expression. The meal finished, the inn-keeper extended his hand, into which were to fall the anticipated coins for the price of the meal. The art-genius fished in his pockets—nary a soldo made its appearance! The blank expression on Raphael's face was a study to behold. The inn-keeper scowled. Noticing that the artist wore no jewelry that could be seized as collateral, the inn-keeper was flabbergasted, but quickly realised that he could protect his interests by inducing the artist to leave a sample of his creative genius in payment of the succulent meal. A brief consultation was held, the result of which was that Raphael, espying the clean surface of a near-by beer-keg, prepared himself to decorate it with a sketch of some kind which, in any event, would appease his creditor. Happily, a young mother, holding in her arms her baby boy, was approaching. It did not take long to induce her to pose for a picture, and thus the art-world became the richer by a picture that now is actually priceless. In vain have art-collectors and dealers offered huge sums for it; it remains safely in its resting-place in the Pitti Palace picture-gallery. With the information here presented, the countless thousands of admirers of Raphael's popular masterpiece—most of whom doubtless read PHOTO-ERA—may be interested to read the account of a keeping-process to which it is proposed to submit the great painting, "The Sistine Madonna", in the Dresden Art Gallery, in the hope of securing it to future generations. We are reprinting it with the permission of *The Literary Digest*, in a recent issue of which it appeared.

"IRONING A PAINTING TO SAVE IT.—Ironing one of the most famous paintings in the world onto its supporting fabric with electric irons is an expedient to be employed, it is reported, in restoring and preserving the famous Sistine Madonna of the great Italian painter Raphael, who died in 1520. Says Dr. E. E. Free's *Week's Science* (New York):

"'This painting, now the chief treasure of the art museum in the German city of Dresden, shows the Madonna and Child, with a portrait of Pope Sixtus IV on one hand and one of Saint Barbara on the other. The painting also contains the famous Raphael cherubs, which have been so much copied, even without the remainder of the picture. For some time the museum authorities have been concerned by the tendency of the paint of this irreplaceable work to scale off from its attachment to the fabric behind it. The painting already has been restored on previous occasions, the colors having been cleaned and freshened and the loose paint fastened down with paste. These efforts having proved not permanent, it is now proposed to iron down the loose paint with carefully controlled electric heat, using special cementing materials which will be softened by the iron but which will not damage the painting.'"

Cloud-Negatives

LANDSCAPE-CAMERISTS, as far back as we can remember, have considered it desirable to have on hand a goodly supply of cloud-negatives. Whenever they desired to make a print of a landscape with blank ("bald-headed") sky, they would go through their collection of cloud-negatives and select one that would harmonise with the landscape proper. But the resourceful photographer would not be satisfied with substituted cloud-forms of this kind. He would resort to his bottle of groundglass substitute—we think that Hance's preparation was the kind in general use—pour it over the back of the negative—the latter being held quite level with the fingers—in the same way as the wet-plate photographer pours his collodion over the albuminised surface of the negative. If the reader is not familiar with this feature of wet-plate photography, and is eager to learn, let him visit any half-tone establishment where half-tone blocks are being constantly prepared. Almost every newspaper is preparing them all the time. No editor goes to press without the requisite number of cuts. The process will be found to be extremely interesting.

The Prize Misprint

FIRST prize for typographical errors should be awarded a nameless printer rescued from obscurity in "Adventures in Editing", a book compiled by Charles Hanson Towne.

The printer was setting up a page in a book of poems by Ella Wheeler Wilcox. She had written as her first line, "My soul is a lighthouse keeper".

A careless printer divided the words differently and the poetess and her admirers nearly fainted when they saw a poem which began, "My soul is a light housekeeper," suggesting the patronizing of delicatessen shops.

Contact.

THE MONTH IN APPLIED PHOTOGRAPHY

C. B. NEBLETTE, A.R.P.S.
Division of Photography, A.M., College of Texas

Movies Are Used for Instructional Purposes in New York City Public Schools

The New York Times of Sunday, January 29, 1928, carried a popular account of studies made in the public schools of New York City on the value of the motion-picture for instructional purposes. It is stated that motion-pictures are now shown in seventy or eighty of the public schools of the city and that four hundred reels of film have been carefully selected for their relation to thirteen courses of instruction—physical training, biology, history, geography, civics, home-economics, and vocational guidance. A motion-picture course for a semester consists of twenty lessons of two reels each, these being selected and arranged by the instructor so that each fits into its proper place in the course.

The experiment was begun with biology. All available film relating to this subject that could be obtained from the producers was carefully scrutinised, and that which did not seem appropriate for the purpose in mind was discarded. Some of it was found to be unscientific, some theatrical, and some was inadequate and inaccurate. Finally, the portions selected were arranged in logical sequence, new titles and explanatory matter was added, and copies made for school use.

Dr. Earnest L. Crandall, director of lectures and visual education of the City Board of Education, writes rather optimistically of the results which have been obtained. He is quoted as having said: "The motion-picture is invaluable for helping the student to a correct and complete visualisation of that about which he is studying. We have found it of immense help in biology, not only in the portrayal of unfamiliar forms, but in the depiction and analysis of life processes. In chemistry it may be made to take the place, to perpetuate, or to supplement the laboratory experiment in many cases. In history and literature it plays the double rôle of re-enacting actual episodes and of painting in an unfamiliar background. A child who has seen Julius Cæsar screened will at least know the difference between a toga and an overcoat".

Concluding, he says: "It is not, however, a royal road to learning. Neither the teacher nor the textbook can ever be replaced by the screen, and there are many phases of all subjects which can be better illustrated through other media".

"The Flag" in Technicolor

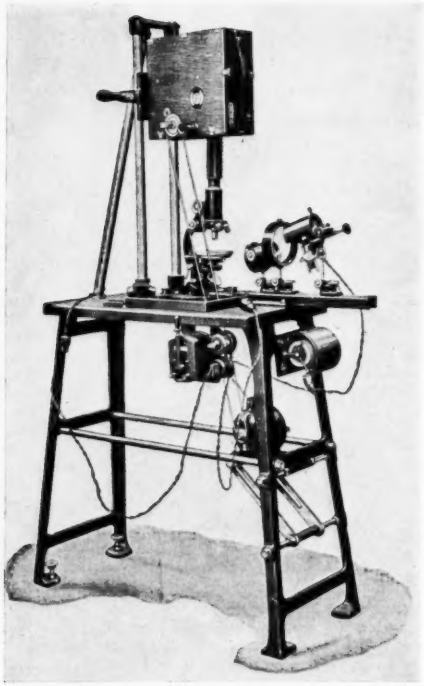
By the merest accident, the writer saw a few days ago one of the Metro-Goldwyn-Mayer short subjects in Technicolor on "The Flag". It was not listed on the screaming posters outside, which featured a highly advertised production which turned out to be a rather cheap and tawdry story hung on two well-known actors whose names in themselves are sufficient to ensure a well-filled house; but, like Cinderella, it was by far the better production of the two. The production is a short one of about two reels, all in Technicolor, dealing with the evolution of the American flag. The story which has been worked into the production is not in itself of much importance. It is, however, logical, and has the merit of being unobtrusive; so that the primary purpose of the film is never obscured by the story, which, nevertheless, saves it from being merely a pictorial recital of the history-book legend of Betsy Ross and the designing of the Stars and Stripes. Technicolor has been employed with wonderful effect, and the picture is very effective. It appears to the writer to be a step in a direction which will, if continued, meet with a hearty response from the public, although the writer's own preferences and inclinations may have led him astray on this point. At any rate, it is a production which is well worth seeing; and, as it is a short subject which is not likely to be extensively advertised, it is well to ask your exhibitor if he intends to secure it, and when. Although it may be said that this is advertising, and that this page should not be given over to advertising, the writer feels that in this case it may be pardonable.

The Camera in Costume Designing

Under the title of *The Silhouette Camera* the Extension Service of the College of Agriculture at the University of Wisconsin has issued a circular on the use of the camera in the designing of costumes. Although the description refers to the use of a camera obscura which is used by the students for tracing the outlines of the figure and the essential lines of the costume, much that is included might apply equally well if photography were employed in place of tracing. Silhouette photographs are so easily made that it is a wonder that the writers did not at least call attention to the fact that in place of the method of tracing on the glass of the camera obscura a photograph might be made in a fraction of the time and would, in a large number of cases, be preferable to the average drawing. Nevertheless, the circular, which is Number 214, will be of interest to those who may be interested in costume design, and in the relationship of the figure and proper costuming.

New Apparatus for Kiné-Photomicrography

Still photomicrography is, of course, a very old branch of applied photography, dating back almost to the beginnings of photography; but motion-picture photomicrography is not quite so old, although it is actually older than one would at first think. Although kiné-photomicrographs were made as early as 1908, it is only within the last few years that widespread interest has been shown in the subject. Kiné-photomicrography has been rather extensively employed in the last few years in the investigation of a large number of problems, ranging all the way from studies on the Brownian movement of gold sols and the formation of silver sulphide sensitising specks in emulsions to the action of certain bacteria. Kiné-photomicrography represents the only way in which the various stages in the life history of a living preparation, or the phases in the movement of an inorganic mixture or compound, may be properly recorded. Until the last few years, however, comparatively little work was done on the subject, because there were few who could avail themselves



Courtesy of E. Leitz, Inc.

FIGURE 1 C. B. NEBLETTE

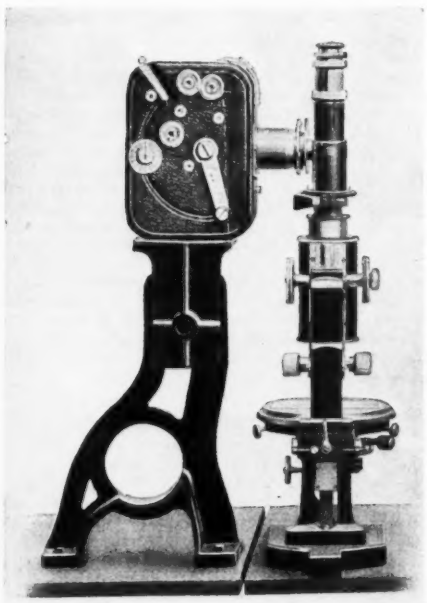
of the specially designed apparatus that was required. This condition has now been removed, to a certain extent, at least, and a number of manufacturers are supplying apparatus designed especially for kiné-photomicrography.

The firm of Ernest Leitz of Wetzlar, famous for their microscopes and other optical instruments, have lately introduced their "Universal Apparatus for Micro and Macro Motion-Pictures". This apparatus, which is illustrated in Figure 1, consists essentially of a firm steel stand carrying the microscope, motion-picture camera with its stand, and the arc-light, together with the necessary motors for the operation of the camera and resistances for the illuminating unit. The camera is operated by an electric motor, thus leaving both hands free to manipulate the specimen and to adjust the focusing-device so as to keep the organism in sharp focus. With the Leitz observation piece it is possible to observe the object at the same time that the camera is in operation. This is accomplished by means of a plano-parallel glass-plate in the path of the light-rays from the microscope to the camera. The major portion of the light passing through the objective of the microscope continues on to the camera; but a portion of it is reflected by the glass plate into the observation eyepiece, shown at the lower side of the camera, where the operator is able to observe the subject even while the camera is in operation, and to make such corrections as may be necessary to keep the subject in sharp focus or to stop the camera when it moves entirely outside of the field of the lens. All in all, the apparatus appears to be excellently designed, and is one which no doubt will be of interest to many in medical schools and elsewhere.

The Zeiss equipment can hardly be referred to as new, since it has been on the market for a year or so; but as it appears to be quite unknown in this country, it may be well to mention its principal features. Instead of an electrically driven camera the Zeiss apparatus uses the spring-driven Ica Kinamo, with which twenty feet of standard film may be exposed at a single winding. The optical equipment consists of a standard microscope fitted with the Zeiss "Microphote" observation piece, which is similar to that used in the Leitz apparatus, except in the use of a prism instead of a plane glass disk for splitting the light from the microscopic objective. The illuminating unit is supplied separately, and consists either of a small automatic arc or a small concentrated-filament lamp of the locomotive headlight type. The entire apparatus is intended to be solidly mounted to a heavy, substantial table where it will be reasonably free of outside vibration. (Figure 2.)

Those who use, or are interested in the use of, the 16-millimeter film will be interested in the apparatus which is to be introduced by the Bausch & Lomb Optical Company following the designs of Tuttle of the Eastman Research Laboratory. Tuttle's apparatus uses the Model A Ciné-Kodak, with a specially designed electrical drive and an observation piece of his own design.

There may be other manufacturers of apparatus for kiné-photomicrography; but as yet I have not heard of them, nor have I had an opportunity to examine their products. Further introductions in this field will be duly chronicled in this department as they make their appearance.



Courtesy of Carl Zeiss, Inc.

FIGURE 2 C. B. NEBLETTE

LONDON LETTER

CARINE AND WILL CADBY

Is English film-production at last waking up? British Instructional Films, formed last year for the purpose of taking over the business of instructional films, has made an arrangement with the Welwyn Garden City authorities for the erection of studios there, under which two studios are to be built. One will be ready for work in the early summer, and probably "Conquest", the story specially written by Mr. John Buchan, M.P., will be the first picture to be shot. Great hopes are set on this company, as can be seen by the fact of the deferred 1/- shares standing at 14/- which, of course, discounts the future results; but in film-circles they are not regarded as being overvalued. We shall see what we shall see; and as we hear there are other developments contemplated in connection with this company, it is, at least, to be hoped that a healthy start in film-production will be made.

The Prince of Wales is interesting himself in this neglected British industry, and cleverly killed two birds with one stone, so to speak, when he pressed the film into the service of the lifeboats, another subject which has his sympathies. When in Paris the Prince met M. André Citroen, and was interested to hear details of the Citroen Central African Expedition; he also saw the film of this adventure, called "The Black Journey". The outcome of this meeting has been a two-day visit to London by the Citroens, and a gala performance of the Citroen film in aid of the Royal Lifeboat Institution. The Duke and Duchess of York, with M. and Madame Citroen, were the Prince's guests at dinner at York House before the performance, and all came on to the Plaza Theater together.

At the close of the performance the Prince of Wales and M. Citroen went on the stage together and made speeches which were received with great enthusiasm, especially when the Prince pointed out that there were those present who had been responsible for filming the expedition; and when he turned to M. Citroen and thanked him for the thousand pounds which the performance had realised for the Lifeboat Fund, the enthusiasm of the audience knew no bounds. We do not know how such institutions are run in the States, but here our Lifeboat Institution is supported entirely by voluntary contributions.

Now that the disagreements of the film-producers, renters, etc., are at last over, the general public, wearied and bored with the long-drawn-out bickerings, have turned with fresh interest to what is really being achieved in this direction, and their attention is being drawn particularly to British films. There is certainly a bigger boom in kinemas than we can remember.

The most talked about today is "Shooting Stars", by Anthony Asquith, an Instructional Film production. It was booked for only a fortnight at the Plaza; but already the run is being extended. Naturally, any achievement by the son of a former Prime Minister is sure of attention; but, in this case, it is undoubtedly a clever bit of work, and if Mr. Asquith gives away some of the secrets he learned at Hollywood, well, all the more amusing for the audience. Besides, they are hardly secrets, for none of us are so guileless as to believe that Montmartre scenes are shot in Paris, or the palaces of Ruritania in Eastern Europe.

The title has nothing to do with the firmament, but with stars of the kinema, and the shooting applies to guns, not to heavenly bodies; for "Shooting Stars" is a film within a film, and we are shown interiors of studios, and are given some inside knowledge about the making of films.

There have been innumerable letters in the press about "The King of Kings", mostly protesting against it, though a few have praised its producers for bringing the subject within reach of millions of ignorant film "fans". The captions have come in for censure, and one cannot get away from the fact that they take rather impudent liberties with the text of the Gospels.

But a far more serious and determined opposition has developed against the production of "Dawn", the Nurse Cavell film in which Miss Sybil Thorndike plays the leading rôle. She is a great light of the English stage who was chosen by Mr. Bernard Shaw to represent his St. Joan in the play of that name. We, among many others, are hoping that popular feeling will be strong enough to get this film suppressed. We agree entirely with Lady Oxford—the former Mrs. Asquith—who wrote to *The Times* protesting that just when all our efforts were being directed towards the re-establishment of international peace and good will this ugly tragedy of the war should be revived.

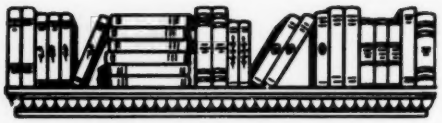
Now Sir Austen Chamberlain has taken the matter up, and his letter to the German Government has been the general topic for comment last week. This official initiative in endeavoring to prevent the stirring up of racial animosities is said to have much improved the relations between the two countries.

Unfortunately, the British Government has no power of political censorship; but it has begun to mobilise every available means of pressure to get the film suppressed. Mr. Wilcox, the producer, is determined the film shall be shown; and, even if it should be refused a license by the Board of Censors, he threatens to make the necessary arrangements to exhibit it outside kinemas. His point is that Sir Austen refused to see it at the trade-view, and seven months ago the authorities were well aware that the film was being made.

As in many commercial enterprises, the British film is handicapping itself in the same old way. We hear that rentals for British films are excessive. For instance, in a small country-town, one can imagine that £25 paid for an English film would weigh rather heavily against the £3 asked by an American company for a complete three-day program, including feature film and two reels of comedy or even a serial.

That is unfortunately so typically British—killing the goose that lays the golden eggs. However, now there is this great revival in film-interest, perhaps our business people will wake up to their short-sighted policy; for much as we love Americans, we do not wish our own people to "feature" as "mugs" in this respect! ! !

We must ask our readers to forgive us for devoting our entire space this month to the subject of films; but our excuse is that they are just now very much in the air; in fact, today they are the only photographic subject that is thought about and discussed with interest.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

INTENSIFICATION AND REDUCTION, by E. J. Wall, F.C.S., F.R.P.S. 40 Pages. Price, cloth, $1.00. Boston: American Photographic Publishing Company.

Without a doubt, no two processes in photography are more often called upon to remedy errors in exposure than intensification and reduction. Many an otherwise valueless negative has been made printable and thereby saved by the intelligent use of these two processes. Although there have been a number of helpful texts available, none of them is quite so comprehensive as this latest book by Professor Wall. The very latest methods and formulas are presented with helpful and detailed data, so that the amateur and the professional photographer may determine for himself the best method to use to fit his particular problem. It is, therefore, a book which will be of immediate value to every worker, and we are glad to recommend it to our readers.

GUIDE TO THE MARKETS FOR PHOTOGRAPHS, 1928. Compiled and edited by A. W. Board. 123 Pages. London: The Fountain Press, Ltd.

This very helpful British annual contains much excellent and practical information with regard to the preparation and sale of photographs. Although it is addressed to readers in Great Britain, it will be found of service to workers in the United States who are looking for overseas markets. Among the introductory articles are "Camera Journalism", "On the Copyright of Photographs", "Cameras for All Uses", "How Pictures Are Reproduced", "The Royal Photographic Society", "Photography in Other Countries", "Motion-Picture Photography for the Amateur" and "Color-Transparencies for the Amateur". A comprehensive list of markets for photographs is a feature of this excellent little volume.

THE BRITISH JOURNAL PHOTOGRAPHIC ALMANAC. Edited by George E. Brown, F.I.C. 788 Pages and 64 photogravure illustrations. Price, paper, $1.00; cloth, $1.50. Boston: American Photographic Publishing Company.

For the earlier generations of photographic enthusiasts, photography was a favored hobby because it afforded such plentiful opportunities of dabbling in new methods and processes, and the "British Journal Photographic Almanac" was inevitably in constant demand because it proved an ever up-to-date guide to photographic technique. But times have changed; and, with photographic methods largely stabilised, the interest of photographic enthusiasts centers in the results that may be obtained with the pocket camera, rather than in the processes employed. With this changed attitude in view, the "British Journal Photographic Almanac"—with a youthful virility that ill becomes its sixty-three years—has transformed itself into an annual that will charm the non-technical camera-user of today with the series of sixty-four beautiful photogravure reproductions of camera pictures by noted exhibitors. Even so, the new volume is no less useful than in earlier years to those interested in the photographic processes, for its text pages include fifty pages of articles; sixty pages of the latest hints and items of progress; seventy pages of illustrated reviews of the newest introductions in photographic materials and equipment, and one hundred and thirty pages covering all aspects of photographic technique and photographic organisations. For its price there is no annual of greater interest to the average amateur photographer.

"Amateur Movie Making" by Herbert C. McKay, A.R.P.S.

THE first authoritative book upon the subject of amateur movie work has appeared. For a long time the amateurs have asked for a dependable book which would give detailed information concerning those branches of movie work which are practical with the apparatus now available. "Amateur Movie Making" was written by Herbert C. McKay, A.R.P.S., who has gained an international reputation through his writing and research in the amateur field. The book is published by the Falk Publishing Company of New York, who publish photographic reference works exclusively.

The book contains approximately 150,000 words, grouped into twenty chapters, a copious appendix, and a glossary of kinematic words and phrases. It is profusely illustrated throughout. The paper used is the highest quality white, non-glare book-paper. The binding is brown, Spanish grained, Moorish-finished fabrikoid, embossed and stamped in gold. The appearance is such that it will compare favorably with the finest specimens of the book-binder's art.

Copies may be obtained from the publishers of this magazine, from photographic dealers, or direct from the publishers, the affiliated companies, Falk Publishing Company–New York Institute of Photography, 10 West 33d Street, New York City. The price is $3.00.

A WRITER, unknown to us, once outlined a program for the New Year as follows:

"I will start anew this morning with a higher, fairer creed; I will cease to stand complaining of my ruthless neighbor's greed; I will cease to sit repining, while my duty's call is clear; I will waste no moment whining, and my heart shall know no fear.

"I will look sometimes about me for the things that merit praise; I will search for hidden beauties that elude the grumbler's gaze; I will try to find contentment in the path that I must tread; I will cease to have resentment when another moves ahead.

"I will not be swayed by envy when my rival's strength is shown; I will not deny his merit, but I'll strive to prove my own; I will try to see the beauty spread before me, rain or shine—I will cease to preach *your* duty and be more concerned with *mine*."

Contact.

PHOTOGRAPHER, to a mutual friend: "The fact is, not one customer in a dozen knows a good photograph from a bad one."

Mutual Friend: "That's what I call luck for some of you fellows, eh, what?"

Thru The Darkroom Door.

HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.

Third Salon International d'Art Photographique à Roubaix

We have received entry-blanks for the Third International Salon at Roubaix, France, under the auspices of the City of Roubaix, to be held June 2 to 14, inclusive, 1928. The last day for receiving prints will be May 5, 1928. Further particulars may be obtained by addressing Monsieur Th. Gayet, Secrétaire Général de L'Amicale-Photo, 7 Rue Condorcet, Roubaix, France.

Real Sociedad Fotografica de Madrid

The Seventh International Salon of Photography in Madrid, Spain, will be held June 1 to 15, inclusive, 1928. The last day for receiving prints will be May 10. Particulars and entry-blanks may be obtained by addressing Secretario de la Real Sociedad Fotografica, Principe 16, Madrid, Spain.

No Ciné Kodak Films in Bermuda

Through the courtesy of Allen Fraser, subscriber and contributor to our competitions, we are passing on a suggestion which he made in a recent letter. According to Mr. Fraser, travelers with Ciné-Kodaks should visit Bermuda with an ample supply of Ciné-Kodak film, as there are no dealers which carry this film in stock. No reason is given for this situation. Readers who contemplate visiting Bermuda will do well to get in touch with Mr. Fraser, who is a professional. He may be reached by addressing Box 81, Hamilton, Bermuda.

Seattle Camera Club Fourth Exhibition

The Fourth International Exhibition of Pictorial Photography, under the auspices of the Seattle Camera Club, will be held May 11 to 24, inclusive, 1928. Last day for receiving prints, foreign, April 5; United States, April 15. Entry-blanks and further particulars may be obtained by addressing Dr. K. Koike, Chairman, 422½ Main Street, Seattle, Wash.

Picture-Exchanges at the Philadelphia Convention M. A. S.

Haven't you seen many times a striking photograph which you would be proud to frame and hang in your studio, office, or laboratory? And if you knew the man who made it, what a feeling of friendship, of fraternity, of intimacy with the master craftsmen of your profession would come with a collection of such pictures surrounding you!

One could never forget such a collection as Billy Rau, that prince of photographers, had in his private office in his Filbert Street Studio.

Inspiration and incentive, understanding, pleasure, gratitude, pride, respect—how many of the finer qualities of mind and heart may be aroused by a beautiful picture!

If you would join the Exchange Bureau, be sure to notify the Custodian of the Exhibit, Benjamin Franklin Hotel, April 15 to 18, inclusive.

The Photographic Salon of the Middle Atlantic States Convention, with the projection of the important pictures and analytical criticism by Yarnell Abbott, will undoubtedly be the most important feature at Philadelphia. Closely following will be the visit on Monday to the New Museum, a $15,000,000 structure in the Parkway.

The forty-three paintings of the eighteenth century form one of the most notable landscape and portrait collections of the early British School; but the Museum contains, beside pictures and statuary, all the productions of man's hand, with the beauty inevitably imparted by hand-work, in furniture, textiles, tapestries, rugs, pottery, glass, and metal work in bronze, iron, and silver—objects of use as well as beauty, corresponding to those which surround us in our daily lives.

The floor plan is a veritable Main Street, exhibiting a pageant of the evolution of art from the beginning, flanked on either side with thirty-seven period rooms reproducing the paneling, fine furniture, metal work, tapestries, window draperies, and upholsteries of the various periods—briefly, a very temple of inspiration to creative work both in design and technique, with a direct appeal to each and all, from the humblest layman to the greatest artist.

Mr. Fiske Kimball, the Director of the Museum, and Mr. Theodore M. Dilloway, Director of Art in Public Schools, will address the members at the Museum, Monday, April 16.

Innovations at the M. A. S. Convention

In the Salon Convention, Middle Atlantic States, Philadelphia, a radical departure is made in having only half-day sessions, leaving the afternoons free for studying the Exhibit, visiting art galleries, etc.

Much thought has been given to the selection of speakers and the arrangement of the demonstrations, which will begin about 9.45 and end about 12.30.

There will be a variety of subjects presented by the ablest men, all with the possible exception of one, speakers and demonstrators who have never appeared at any previous conventions.

The Pennsylvania Railroad Quartette will sing, and other music will be provided between numbers.

The Salon, however, will be the chief attraction, and without doubt the finest thing of the kind that any of our conventions have ever provided.

Salon Committee: Richard T. Dooner, 1822 Chestnut Street, Philadelphia, Pa.

New Cinophot an Exclusive Drem Product

Those who read Mr. Herbert C. McKay's interesting review of the new Cinophot motion-picture exposure-meter which appears in his department, this issue, will be interested to know that this model Cinophot is made exclusively for the Drem Products Corporation of New York. This corporation owns the sales rights of this new meter in all parts of the world.

Portage Camera Club, Akron, Ohio

We have recently received an interesting program of the activities of the Portage Camera Club, 37 South Howard Street, Akron, Ohio. Among the many practical and helpful lectures, demonstrations, exhibits, movies, and visits to art-galleries, we noted one thing which might well be followed by other camera clubs situated near an international exhibition of photographs. This club went in a body to view the pictures at the Pittsburgh Salon. Without a doubt, such a trip will prove to be of inestimable value to the spirit and the artistic education of any camera club.

Bass to Have Camera Exposition

The Bass Camera Company, 179 West Madison Street, Chicago, announces a Camera Exposition beginning May 1 at its well-known photographic establishment.

Everything good in photography in motion and still camera equipment will be exhibited, including an interesting exhibition of the making of celluloid film and a graphic exposition showing the evolution of the camera from 1885 up to the present time. All amateur and professional photographers are welcome.

Exhibition of Carbon Prints

One of the interesting midwinter displays at the Du Pont Products Exhibit at Atlantic City, and one which attracted a great deal of attention, was the showing of a series of carbon prints from the Bachrach Studios. The revival of this branch of the photographic art was explained to the visitors to the store by the staff. The prints were mounted on the finest of ivory Pyralin. The display occupied one of the large Boardwalk windows. This was rendered more attractive by velvet draperies in dark brown and silver, which greatly enhanced the beauty of the prints.

Dallmeyer Lenses for Kinematography

Now that the spring and summer months are close upon us, owners of amateur motion-picture cameras will wish to be as well equipped as possible. Although the camera itself is very important, there is a great deal to be said in favor of possessing practical information with regard to principles and equipment. The Herbert & Huesgen Company, 18 East 42d Street, New York City, has recently issued a booklet entitled "Dallmeyer Lenses for Amateur Kinematography", which is exceptionally helpful to all owners of 16-mm. cameras. The technical data, tables, and general information given will be found to be practical and of immediate service. We suggest that our readers obtain copies of this booklet without delay.

Dr. T. W. Kilmer to Speak at M. A. S. Convention

Probably there are few amateur photographers who have made a greater success of portraiture than Dr. T. W. Kilmer of New York City, whose remarkable portraits are known to pictorial photographers in all parts of the world. Although he is an amateur, he does work of professional quality, and of such a high artistic and technical standard that he has been asked to lecture and to demonstrate his methods at the Middle Atlantic States Professional Photographers' Convention at Philadelphia. We know that Dr. Kilmer will prove to be one of the most interesting and helpful speakers on the convention program.

Photographic Correspondence Schools Approved

The new edition of the "Home Study Blue Book", compiled by J. S. Noffsinger, Ph.D., and published by the National Home Study Council, Washington, D.C., should be in the hands of all those who seek an education, but cannot take up a resident course at school or university. Virtually any course of study may now be taken by correspondence. Over three hundred subjects are listed. Among them we find the several branches of photography well represented. Furthermore, we were pleased to find the American School of Photography, 3601 Michigan Avenue, Chicago, and the New York Institute of Photography, 10 West 33d Street, New York City, listed among those examined January 1, 1928, and endorsed by the National Home Study Council. Both of these schools are represented in our advertising pages, and have been for a number of years. We are glad to find our own endorsement approved.

Salon d'Art Photographique de Bruxelles, 1928

The International Photographic Salon at Bruxelles will be held April 7 to 22, inclusive, 1928, at the Musées Royaux du Cinquantenaire, Bruxelles, Belgium. Particulars may be obtained by addressing Monsieur Mce Devaivre, Editeur, Rue Markelbach 152, Bruxelles.

Are Amateurs Outgrowing Snapshot Equipment?

To the Editor of Photo-Era Magazine:

I was much interested in the article in the February number of Photo-Era Magazine in which Mr. Lester Kahn speaks of "Photographic Shortcomings and Suggestions". The only fault I can find with the gentleman is that he didn't say enough. I venture to supplement his remarks.

There are some people in this country—and apparently in their right minds—who don't care to use roll-films, at least exclusively. These people have graduated from the snapshot stage, and some of them prefer to develop their own negatives. In fact, they may be said to be people who, without too much exaggeration, are really trying to use photographic media for conveying ideas or sentiments that they have in mind to other people—not simply information, as in print; but a conception of beauty or grace or something more or less inspiring to another soul capable of inspiration.

Most of these people have discarded the flumdiddle about there being one standard exposure and one standard development—a piece of nonsense very much like one standard medicine that is warranted to be a sure cure for falling hair, erysipelas, ingrowing nails or a weak heart. Of course, there is a rough average standard for the average picture exposure and development; but anybody that knows anything about photography knows that there are times when you have to increase or diminish your exposure and your development in order to render certain scenes with truth and fidelity.

Now you can get these effects with proper handling of individual negatives, and you can't get them, very conveniently at least, with a long film in a box where you develop the twelve at one time.

And you can do it with single plates, with cut-films and with some brands of film-pack adapters—and others not.

Now the queer thing about all this is—and by the way it is not so queer either, if you will consider the

commercial side of the question; but I won't go into that—the queer thing is that in this country everything in the manufacture of photographic goods turns to roll-films. I wonder why? Oh, of course, there is the good old stand-by argument about heavy plates and all that sort of thing. But all of us don't climb mountains when we make pictures, and motor cars are in common use, and the roads are getting better every year. And film-packs don't weigh much, nor do cut-films. And nowadays we don't carry big cameras, and a two and a quarter by three and a quarter plate doesn't weigh much. And two good negatives are worth more than a dozen bad ones.

Look through any photographic magazine, PHOTO-ERA MAGAZINE for example, and see how many—or rather how few—cameras are advertised that will take plates, cut-films or film-packs, except reflex cameras. The chief objections to the latter are expense, weight, space, and a low viewpoint.

Nor, on the other hand, need we harbor the delusion that manufacturers of photographic goods are investing their money in philanthropic or altruistic schemes for the general welfare and uplift of poor, sinful, unartistic humanity. They manufacture what they think they can sell. This raises the question, Have we, as a nation of photographers, advanced beyond the mass-production, snapshot stage, or have we not? All signs indicate an affirmative answer.

And, if we are moving in that direction, are American manufacturers recognising that fact? Look again at the advertisements. Who among the advertisers seems to be awake to the facts of the case—the European manufacturers or the Americans?

E. L. C. MORSE.

Seventh International Congress of Photography

THE Seventh International Congress of Photography will be held in London from Monday, July 9, to Saturday, July 14, 1928, both dates inclusive, under the auspices of the Royal Photographic Society, in co-operation with the Commission Permanente des Congrès Internationaux de Photographie, and under the patronage of Their Majesties the King and Queen.

The Congress is being organised by a committee of representatives appointed by the leading scientific and photographic societies of Great Britain, at the invitation of the Royal Photographic Society. It will provide an opportunity for all who are interested in any branch of photography or its applications to meet together to discuss points of common interest, and to agree on standardisation of methods of procedure, apparatus, and so on. Among the points for standardisation to be considered will be those relating to kinematography and plate-testing methods, which were dealt with in a preliminary manner at the previous Congress in Paris in 1925.

As in the case of previous congresses, the seventh will consist of three sections, dealing respectively with:

1—*Scientific and Technical Questions:*

(*a*) Theoretical Aspects of Photography (including the theories of sensitivity and the latent image, photochemical questions, sensitometry, density measurement, the properties of materials used in photography, etc.).

(*b*) Photographic Practice (manipulations, apparatus, photographic optics, stereoscopy, telephotography, photographic processes, etc.).

(*c*) Scientific Applications of Photography (including spectroscopy, radiography, astronomical photography, photographic photometry, photomicrography, natural history and meteorological photography, aërial photography, phototopography, photography applied to ballistics and physical measurements in general, photography applied to chemical and biological investigations, etc.).

(*d*) Industrial and Other Special Applications of Photography (kinematography, photo-engraving processes, color photography, reproduction of industrial drawings, commercial applications, etc.

2—*Pictorial Photography.*

3—*Bibliography of Photography, Photography in Bibliography, Record Photography, History of Photography, Patents, Copyright, other Legal Questions, etc.*

During the Congress it is proposed to hold exhibitions of pictorial and record photography and of historical apparatus. The Congress will include general meetings, sectional meetings, joint meetings of sections, special lectures and addresses, a banquet, and visits and excursions to places of interest. The membership subscription does not include the cost of the banquet, nor of visits and excursions involving the payment of traveling fares, admission fees, and so on. Relatives and friends of those attending the Congress, and who are not directly interested in its proceedings, will be entitled to attend any of the excursions and social functions on joining as associate members.

Papers on any aspect of photography or its applications are invited, and should be sent to the Honorable Secretary in duplicate, accompanied by abstracts in duplicate, as soon as possible, and in any case not later than June 1, 1928. The number and importance of the contributions which have already been promised assure the interest and success of the Congress, and it will be of a widely international character, especially as local National Committees are being formed in the chief foreign countries for the purpose of considering matter to be presented at the Congress.

A full program of the Congress arrangements will be issued to members before the opening date, and it is hoped to issue in advance abstracts of the papers to be presented at the meetings.

A full report of all the papers read at the Congress and of the addresses, discussions, and resolutions, etc., will be published and issued gratis to all full and founder members.

Further particulars, and membership and subscription blanks may be obtained from Dr. C. E. K. Wees, Eastman Kodak Company, Kodak Park Works, Rochester, N.Y. The Honorable Treasurer and the Organising Committee have their headquarters at 35 Russell Square, London, W.C. 1, England.

New Catalog Issued by Burke & James, Inc.

WITH all due respect to the many excellent photographic textbooks which are indispensable to the amateur and professional photographer, we must admit that when new catalogs make their appearance we get a real thrill from a thorough study of each of their pages. There is always something new, or something old in a new dress, so that we turn each page with anticipation. The recent catalog, No. 170, issued by Burke & James, Inc., 223 West Madison Street, Chicago, is well worth writing for and taking time to look over carefully. Whether one has any intention to make a purchase or not, there is much practical information to be had. Furthermore, it is through a thorough reading of catalogs and descriptive matter that we are able to keep up with the many equipments, processes, and accessories which energetic manufacturers are offering these days.

THE EDITOR'S CORNER

Photo-Era Trophy Cup Race Scores

As June, 1928, approaches and the race for the PHOTO-ERA TROPHY CUP becomes more exciting, we note the increasing number of entries from camera clubs which have not heretofore been represented in the race. Furthermore, there is more careful attention being paid to following the rules, so that each camera club may receive full credit for what its members win.

We wish to make a correction in the scores as recorded in our March issue. In checking up pictures submitted by camera club members and the data which accompanied each print, we discovered that the First Prize, Beginners' Competition, won by Caroline Goldstein and the Second Prize, Beginners' Competition, won by Helen R. Miller, should both have been credited to the Brooklyn Institute. Both of these ladies are members of the Department of Photography and active in the pictorial work of this organisation.

In the Advanced Competition, ending February 29, the First Prize award was won by James D. Creegan of the Wilkes-Barre Camera Club; the Second Prize was won by M. A. Obremski of the Syracuse Camera Club, and the Third Prize by William O. Yates of the Cleveland Photographic Society. Winners of prizes in the Beginners' Competition were not members of any camera club, according to their own data.

We have tried to be very careful in checking our records; but if any of our readers discover any errors or omissions we shall welcome correction. According to our corrected records the standing of the camera clubs is now as follows:

Seattle Camera Club	2
Brooklyn Institute	4
Fort Dearborn Camera Club	2
Cleveland Photographic Society	3
Syracuse Camera Club	1
Wilkes-Barre Camera Club	1

We Announce an Exceptional Series of Articles

THANKS to the wholehearted co-operation and good will of many of the leading pictorial photographers in the United States and overseas, we begin in our May issue a series of articles under the title of "Why I Am a Pictorial Photographer", and one full-page illustration selected by the author himself. The order in which these articles make their appearance has no relation to the relative merits of the pictorialists involved. The purpose of the series is to give our readers a helpful and stimulating personal glimpse of the workers, whose names are well-known in the leading salons of the world. Among the first in the series will be articles by Louis Fleckenstein, Dr. K. Koike, Kenneth D. Smith, Francis O. Libby, Louis F. Bucher, Arthur F. Kales, William L. Woodburn, Dr. Max Thorek, William H. Zerbe, and others will be announced in due course. We extend our sincere thanks to these and other pictorialists who have made this exceptionally interesting series possible.

Many Good Suggestions Are Coming in

As we go to press with this issue, we wish to thank our readers for the many very helpful and constructive suggestions which they have been good enough to send us with regard to our competitions, and how they may be made of greater service. As these lines are written it is still fifteen days to March 31, when we shall count the votes for and against specified subjects for the Advanced Competitions. The results of the count will be announced in our May issue, and whatever changes are made will go into effect with July, 1928, which is the first number of the new volume for the last six months of this year. It may be of interest to state that, thus far, the vote is more than two to one for specified subjects in the Advanced Competition.

Chapter IX of Arthur L. Marble's Series in May Issue

OWING to unavoidable delays in gathering the required data for Chapter IX of Mr. Marble's series of articles under the title of "Photography in School and College", we were compelled to postpone this chapter to the May issue. This chapter will be of exceptional interest, as it records the results of a questionnaire sent out to many of the leading colleges and universities of the United States with regard to what they have done and are doing photographically. We believe that many of our readers will be surprised to learn of the photographic activity in evidence. As we have hazarded to predict, the science and art of photography is gradually coming to its own as an important subject in modern education.

Rule 8, Advanced Competition, Is Changed

WE are much indebted to many of our readers in helping us to solve some of the problems connected with the conduct of our competitions. Beginning with this issue we have changed Rule 8 in our Advanced Competition so that a competitor who wins three first prizes within a twelvemonth can still enter prints; but he will not be entitled to receive any prize cups for one year thereafter. This change was made so that winners of three first prizes, within a year, might continue to submit prints and not feel that they were barred out altogether for one year.

An Unfortunate Oversight

IN reproducing the prize-winning prints in the February and March Exposure-Makers' Competitions, we unintentionally overlooked crediting the photo-finisher of each print. We herewith give their names and extend our apologies. In the February issue, First Prize, "B. P. O. E., Jr." by Mrs. W. H. Smith, was photo-finished by W. H. Smith, Dallas, Tex.; the Second Prize, "Babes in the Woods", by J. Daniels, was photo-finished by Herbert & Huesgen Company, New York City. In the March issue, First Prize, "The Sand Dunes", by George H. Payne, was photo-finished by H. E. Stanley, Providence, R.I.; the Second Prize, "Summer", by R. E. Midgeley, was photo-finished, but name was not given on data blank. We shall make every effort to avoid a repetition of this unfortunate oversight.

MOTION-PICTURE SECTION

FEATURING

The AMATEUR KINEMATOGRAPHER

Edited by

HERBERT C. McKAY, A.R.P.S.

Dean of the New York Institute of Photography
Author of several motion-picture text books

AND THE

ANNOUNCEMENTS OF MOTION-PICTURE MANUFACTURERS

AND

DEALERS IN AMATEUR EQUIPMENT AND ACCESSORIES

A Department Conducted for and by
Photo-Era Readers and Advertisers

THE AMATEUR KINEMATOGRAPHER

HERBERT C. McKAY, A.R.P.S.
Dean New York Institute of Photography

The New Drem Cinophot Exposure-Meter

We are now in a position to show a sketch of the computing rings of the proposed new Cinophot, which will permit *direct* determination of the right stop, if used with Ciné-Kodaks and all other cameras having a taking speed of 1/32 at normal frequency of 16 frames per second.

If operated with Ciné-Kodak, it is now only necessary to have the instrument remain at 1/32, which is one of the four basic time-speeds selectively placeable within the field of vision. The instrument is placed to the eye and pointed toward the object. A quick turn of the diaphragm-collar closes the iris, and the figure disappears. Now it is slowly brought back to the point when the 1/32 just emerges from the darkness in the instrument. This completes the operation. The number to which the index points on the stop-scale is the stop to be employed on the Ciné-Kodak, giving an infallible correct exposure on regular Ciné-Kodak film, which is employed in Ciné-Kodaks. The entire procedure takes just a few seconds, and the instrument will operate automatically under all light-conditions.

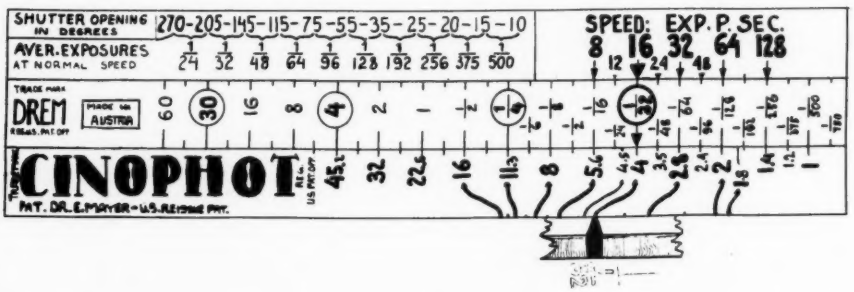
A salient new feature is that the new Cinophot will read on Ciné-Kodak speed, and directly for all those stops which are available on Ciné-Kodaks,—namely, from F/1.8 or F/1.9 to F/16. A manipulation of the second ring is, therefore, eliminated for users of Ciné-Kodaks or similar cameras.

Another new addition is the speed-dial on the third ring. By placing of the normal speed 16, over the stop indicated by the Cinophot, all other stops can be read directly on the instrument which may correspond to the speeds 8, 12, 24, 32, etc., up to 128 frames per second. This will be exceedingly convenient when the Cinophot is used with kinematographic cameras having variable speeds.

The data for taking cameras with variable shutter-sector angles, such as are usually provided in big professional cameras, have been extended.

Besides the direct reading feature, the Cinophot retains also the other possibilities of using it where unfavorable illumination is involved or for time-exposures such as may be necessary in the making of titles or with still cameras. The meter can be switched to read at a basic time of ¼ or 4 seconds or 30 seconds. If, for instance, ¼ is employed and the index would stop at F/11.3, then the specially marked number ¼ on the second ring is made to coincide with F/11.3, whereupon again the Ciné-Kodak stop will show under 1/32; and therefore the camera lens is to be set at F/4.

We have described the Cinophot in its present form in previous articles, and then stated that our thorough tests have not only established the absolute reliability of the Cinophot, but the fact that a number of observers of different degrees of experience and condition of eyesight have all read, on the same subject, the same correct stop, and that the individual variations


SHUTTER OPENING IN DEGREES
270-205-145-115-75-55-35-25-20-15-10
AVER. EXPOSURES AT NORMAL SPEED
1/24 1/32 1/48 1/64 1/96 1/128 1/192 1/256 1/375 1/500
SPEED: EXP. P. SEC.
8 12 16 24 32 48 64 128
DREM
MADE IN AUSTRIA
CINOPHOT
PAT. DR. E. MAYER - U.S. REISSUE PAT.

amounted only to negligible fractions of a stop-number.

The particular selection of the densities employed in the translucent field will compensate for all the complicated influences bearing upon the optical problem involved.

It stands to reason that an exposure-meter of this splendid type should be employed not only because it is a considerable saving in otherwise probably wasted film, which is an important item in the operation of motion-picture cameras; but it certainly precludes the disappointment caused by losing a very desirable opportunity to photograph a scene which may not again be available.

Amateur kinematography has made phenomenal progress in the United States during the last year, and the new facility for direct-reading Cinophots is a very welcome addition to the Drem line of meters, which all developed from the invention of the eminent Dr. Emil Mayer.

Halldorson Lighting-Equipment

We have just received from the Halldorson Company some attractive leaflets describing their lighting equipment for amateur kinematography. This equipment is distributed through Bell & Howell and recommended by them for use with their popular Filmo equipment.

This company manufactures both arc and incandescent lighting equipment, so that the amateur has an unrestricted choice.

The arc-lamp is well designed and attractive in appearance. The mechanism is built into a durable carrying-case covered with leatherette. This case, when closed, measures 5 x 11½ x 14½ inches, and weighs, complete with tripod stand, 23 pounds.

When opened, two brackets hold the two halves of the case in proper relative position. Two 12 x ⅜ white-flame carbons are inserted in the top, and two 4 x ⅜ in the bottom holders. The case is set upon the stand, the connection made, and the starting-chain pulled down. This starts the arc, which will burn without further attention for about four minutes. To use it for a longer period, the chain is pulled down before the arc goes out. In this way a practically continuous light may be secured until the carbons are consumed. A pyrex spark-shield protects the arcs and adds to the value of the light. A ground pyrex-shield may be used as a diffuser, giving a softer light. This arc has many features which will be appreciated by the amateur.

The incandescent lamp is a silvered reflector which may be mounted upon a table-stand or tripped-stand. A 9-ampere (1000-watt) incandescent bulb is used. The light furnished is sufficient for fully timed negatives at normal speed, and F/3.5 when the lamp is placed about six feet from the subject. With the F/2 lens this distance may be increased to about ten feet, making full shots practical.

It may be added that the arc consumes either 10 or 20 amperes at the choice of the operator, the 20-ampere consumption giving a much more brilliant light.

The manufacturers advocate the use of the projection-screen as a reflector.

Making the Home Movie

SCENARIO-WRITING is an art in itself. Every amateur film should be made according to a definite "shooting plan", which we sometimes call the continuity; but the scenario is something more than this.

In developing the continuity, or as it is loosely called in amateur work, the scenario—of the ordinary variety—we begin with an idea, and develop this idea in definite progression. This plan is well enough for the simple record film. But when the film is shot, we still have only a record—unified it is true, arranged in sequence, with incidental shots to add humor; but still, frankly, a record of some of our past activities, such as the fishing-trip.

Amateur work in kinematography goes farther than this, however. Many amateur clubs throughout the country are now actively engaged in production which compares favorably with professional work. To accomplish this, the development of the dramatic scenario is essential. The dramatic scenario is artificial; it involves a certain amount of literary composition and the exercise of the imagination. In view of this fact, certain considerations must be given which are not given to the usual "shooting plan" of the personal record film.

In this work we begin with either the principal incident or with a theme to be developed. If we begin with incident, we must go back and begin the scenario construction with an appropriate introduction. In such cases the principal incident will usually form the action about which the climax is built. If we begin with a definite theme, which is the more difficult and the more nearly artistic method, we must visualise characters, situations, settings, and interpretation which will present this theme to the best advantage.

In either case, we shall have, as the first concrete step in the scenario production, a synopsis of the action which forms the skeleton upon which we construct detail. This synopsis guides us in progressing straight toward the climax, and, at the same time, indicates roughly the amount of elaboration necessary or permissible in the preparation of the scenario itself.

When the synopsis is complete, we are ready to begin the construction of the scenario itself. This is a form of short story in which abstract forms are kept to the minimum and the story developed through concrete interpretation. In other words, the scenario is a story of *action*. Do not include elaborate details of the mental reactions of the actor! Tell what he *does*, not what he *thinks*. The scenario is a story which can be interpreted in pantomime for screen reproduction.

When the scenario is written out in short-story form, go over it carefully and weed out everything which in your estimation cannot be successfully interpreted by the amateur actors who will act in your production. When this is done, you are ready to mould the scenario.

You must have a definite plot. Determine in your own mind just what this plot is; then read the story and see (*a*) if the scenario adequately tells the story of the plot, and (*b*) if it contains any great amount of material which has no direct bearing upon the development of the plot. Correct these points.

Conflict—mental, spiritual, physical—conflict of some kind is essential in the development of a dramatic plot. Read your scenario and see if the principal action throughout the story definitely indicates the conflict between two characters or two groups of characters. If this is not evident, your story will lack dramatic interest. If this conflict is all one-sided, the story will become monotonous. Swing the success in this conflict from side to side. As the climax approaches, arrange for the least favored character to gain considerable advantage in this conflict. This gives you an opportunity to introduce a situation in which the advantage is swung overwhelmingly to the favored character, thus producing your climax. Following the climax, a short scene or two may be introduced to ease the tension produced by the climax itself.

It is a difficult matter to handle a plot with straight sequence. When one scene follows the next in regular order, the scenarioist will allow his action to drag, or he will force the conflict, bringing the climax before its proper place. If he does neither of these things, he can easily reveal the trend of his plot development, so that the spectators can easily foretell the dénouement. In order to break up this obvious sequential plot development, parallel action is often resorted to.

Parallel action is that development in which two groups of characters are followed, and whose action is supposedly taking place simultaneously. For example, in melodrama we may see our heroine attacked by the villain of the play. She is in an apparently hopeless position. This action is developed to a place where something must be done. One or the other must triumph, and this would bring a premature climax. The scene is shifted abruptly to the hero of the play, who is riding to the heroine's rescue. This may be only a flash; but it breaks the continuity. The conflict may now drop back and begin again, and again be broken by this parallel action. By using this artifice, the climax is repeatedly deferred. This brings in the element of suspense, one of the most powerful instruments in the hands of the scenario writer. When you attain that proficiency which enables you to introduce considerable suspense while keeping the full intensity of the interest of the audience, you can literally "lift

'em out of their chairs"—the interest will become so great that spectators will actually grip their chairs in the intensity of their reaction. When you can do this, you are ready to abandon amateur work and start out as a scenario writer. Although this is in no sense a course in scenario writing, it may be remarked in passing that amateur work provides excellent practice in this field.

So far, we have dealt with the positive elements of the scenario; conflict, parallel action, suspense. All of these are dynamic. Our scenario should be reconstructed in such a manner that it will contain all of these elements. When this is done, we shall no doubt find that the action is too abrupt, too rapid—overdone, in fact. We now introduce a certain amount of "relief". We find that our conflict as it swings from side to side produces innumerable little heights which are not as important as the climax, and which we may call crises. After each one of these, we should introduce a scene of peace, of calm, or even of a humorous character. This will counteract the nervous reaction to the crises. When the relief is properly introduced, our scenario should relate a pleasant narrative, exciting, interesting, and leading to a pleasing climax. When this stage is reached, we are ready to write our continuity.

The continuity is always written in about the same manner. It is the scenario itself which is subject to such a wide variation. When the scenario is complete, the continuity is written from it. We may call the scenario the design, and the continuity the blueprint. The one requires original thought, but the second is to a great extent mechanical.

The scenario is read carefully and each change of scene, each change of locale, each change of continuity of thought is noted. These natural divisions are known as "sequences". In a properly made film, each sequence begins and ends with an iris-dissolve or a fade.

The sequences are then taken up in order. The sequence is read and then it is subdivided into portions, each one of which will be shown upon the screen in one continuous period of action. These subdivisions are the scenes. Each scene is identified by a number. These numbers, naturally, run in sequence, beginning with number one.

All spoken dialogue is indicated as a "spoken title". Each bit of description not readily interpreted in terms of action is made the basis of a subtitle or caption. These titles are written in order upon a separate sheet of paper. A copy of this title sheet or "cap sheet" is set aside for guidance in making the titles, later on. Now each scene is carefully studied and the action visualised. If any scene can be made more effective by shooting it from two or more points of view, note this fact. Try to determine the value, if any, of close-ups, inserts, and so forth. Explain every possible detail in terms of pantomime. Instead of using a title to inform the audience that "Tom has received a letter telling him he has inherited a fortune", show him opening a legal envelope, then use an insert of Tom's hands holding the letter in such a position that it is shown upon the screen. Make notes of all of these points.

Finally, make out your standard form for the continuity paragraphs. This will probably contain, in order, the scene number; exterior or interior; subject; distance of subject from camera—close-up, long shot, etc.

After this comes a brief, concise explanation of the action of the scene itself. If there are inserts in a scene, these receive their marginal number; but after the insert is identified, the action of the scene is taken up with "Scene continued, etc." Spoken titles are treated as inserts; ordinary subtitles, which usually occur between scenes, are identified with a number; and the marginal indication reads "Title 56", instead of "Scene 56". For example, we may have:

Title 17: CAMP WAS MADE BENEATH THE SHELTERING COTTONWOODS.

Scene 78: *Exterior—The Camp under the Cottonwoods—Full shot.*

The company come into the set and unpack their saddle-rolls. The horses are picketed, and the men begin to build fire. Cut to:

Scene 79: *Ext.—Same as 78—Semi-closeup.*

Bill has the fire blazing, and the coffee is soon boiling. Bill raises head, smiles, and speaks.

Title 18: (Spoken) "Come and git it!"

Scene 79 (*continued*): Bill spills hot coffee on his finger and drops the coffee-pot into the fire.

Insert 8: Coffee-pot lying on its side in the steaming coals.

Scene 80: *Ext.—Same as 78, angle shot—Full shot.*

Bill tries to rescue the coffee pot—and so forth.

This gives some idea of the construction of the continuity from the scenario. You may or you may not include the approximate film-footage for each scene. If you do, remember that 35-millimeter film requires one foot of film per second, and 16-millimeter film only runs two-fifths of a foot per second. In other words, the 100-foot spool in the 15-millimeter camera will record the same action for which 250 feet of standard film would be required.

You should be able to proceed with what has been given regarding scenario construction. This is an important subject; but there is no space available for a further elaboration of the subject.

Free Films Offered for Home Projectors

PRESAGING a wide development along similar lines, an educational motion-picture, "Fine Arts in Metal", which reveals the methods of manufacture of silverware and bronze, is offered without charge by a great national industry to home-projector owners in the January issue of their magazine, *Amateur Movie Makers*, the organ of the Amateur Cinema League.

Distribution of such free educational films on standard motion-picture stock in schools, clubs, and churches has been carried out for a number of years by such agencies as the United States Bureau of Mines and the Motion-Picture Bureau of the National Council of the Young Men's Christian Association; this is, however, the first instance in which wider distribution of these films has been sought through the newly developed home-projector field, which has reached tremendous proportions in the last two years.

As most home-projectors are designed for less expensive, narrow-width films, the prints of this picture are offered in the amateur width. The picture is three reels in length, and provides a forty-minute performance. Postage or expressage is paid by the home-projector owner.

Many other fine educational films will soon be available along these lines for home-showings, according to those closely in touch with this new development.

This first film to be so offered was prepared by the Gorham Company, and is being sponsored by the Educational Film Division of the Stanley Company.

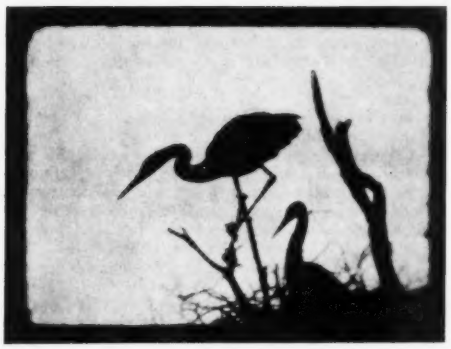


FIGURE 1 GREAT BLUE HERON ON NEST

IRVING L. OAKES

Adjusting the Sights for Telephoto Movies

A FRIEND of mine, having a Filmo Movie Camera of the 16-mm. size, was using a twelve-inch lens, but with very poor results. The sight or view-finder was not adjusted properly for the twelve-inch lens.

With a twelve-inch lens for the 16-mm. film, it is almost like shooting with a long-range gun. To prove this statement, look at illustration Figure 1, "Great Blue Heron on Nest". The picture was made at a distance of about 165 feet. The nest was at least 100 feet above the ground in the tree-top. When shooting at that range, the sights must be very accurate, or the subject will be missed entirely, as was the case with my friend.

We found that the extra focusing-tube, for the six-inch lens, was all right for the six-inch lens, but not for the twelve-inch lens. When using the six-inch finder at 165 feet, and the twelve-inch lens on the camera, we were shooting about six feet to one side of the mark.

How to correct this was our problem. We finally hit upon a plan that proved good.

The camera was made fast to an unmovable support, so that it could not possibly move out of its position while working with it. Next, the twelve-inch lens was put in place and focused on a bright light at about 165 feet from the camera, this work being done at night, of course. After we were sure that the light was centered perfectly, we next adjusted the sights until the light was as it should be in the finder. It was necessary to file a little off the foremost bracket, that holds the focusing-tube in place, to allow the tube to fit closer to the camera; that is, the front of the tube was swung in towards the lens just a little.

After the finder was trued for the 165-foot mark, the finder was again adjusted at the 100-, 50-, and 25-foot distances. This was a great deal of bother, but the results gained more than paid for the trouble. The camera is just as accurate now at 165 feet as it is at 25 feet.

Illustration Figure 2, Camera fitted with twelve-inch lens and view-finder in position.

IRVING L. OAKES.

Comic Possibilities of the Film-Loop

THERE are no doubt many scenes among your personally-made films which lend themselves to the amusing effects accomplished by this simple trick. Suppose, for instance, that you have in your summer-

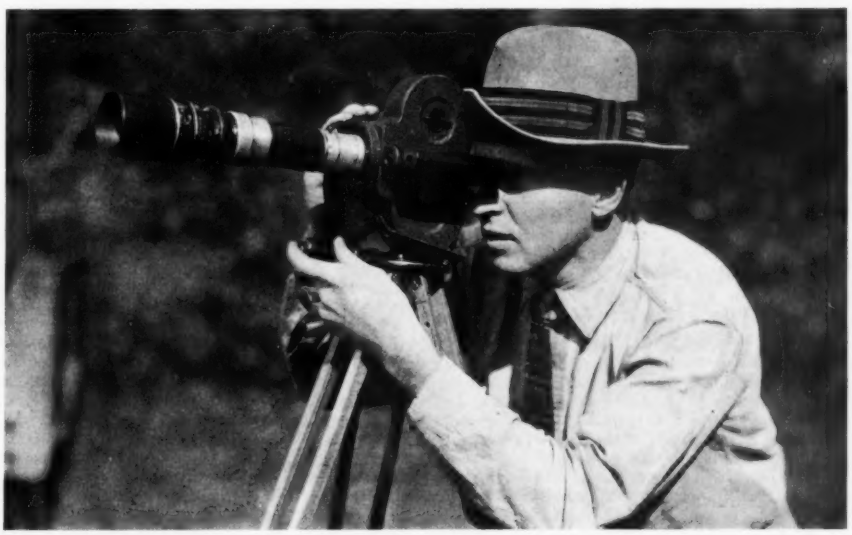


FIGURE 2 IRVING L. OAKES

Showing camera fitted with 12-inch lens and view-finder in position

vacation films a four- to seven-foot scene showing someone dipping a cup of water from a spring or mountain brook, raising it to the mouth, and enjoying the cooling drink. To form the loop for projection, carefully cut the scene from your film at such points that the positions in the first and last frames of the strip are the same. For example, the scene might start with your friend standing upright, cup in hand. Cut it here and then follow through the scene to the point where, after drinking, the cup is lowered to about the same point at which it was held in the opening frame, and cut again. Now splice these two ends together, thread the loop in the projector, and wait for the laughs that are bound to follow.

The effect is evident; your actor or actress fills and drinks the cup of water again and again. Those in your audience will not be surprised at the first few repetitions. Then they will realize that a trick is being played upon them, and the entertaining value of home movies will have scored another victory.

Wonderful sleight-of-hand tricks can be shown on your screen through this same artifice. A magician may be made to extract rabbit after rabbit from a hat without interruption. Any action which can be pictured in a few feet of film, and which can start and stop with the actor in the same pose, can be shown repeated over and over by means of the film loop with assurance that the effect will be amusing.

Filmo Topics.

Institute Standard Camera Making Good

A GREAT number of commercial and industrial organisations have definitely adopted the standard 35-millimeter camera in their motion-picture work. This is done by those who make use of the 16-millimeter positive as well as by those who use the 35-millimeter film for projection. One of these, the Detroit Edison Company, after having used two Institute Standard professional motion-picture cameras for more than a year, has just purchased three more of these cameras from the manufacturers, the New York Institute of Photography, 14 West 33d Street, New York City. This is the most sincere recommendation any camera could receive.

Amateur Cinema Clubs have also found that the 35-millimeter studio-cameras are better adapted to the production of amateur photo-plays than the 16-millimeter size. This is due to the greater range of manipulation and effect-work possible with the professional camera. For such organisations the Institute Standard is an ideal camera, because each purchaser receives a lifetime technical consultation service gratis with the camera. The camera combines light weight, true studio-design, reasonable price; and it produces film of thoroughly professional quality.

Educational Film Courses Made Available to Homes

CHARACTERISED as the launching of one of the great advances in educational procedure of modern times by Hiram Percy Maxim, inventor and president of the Amateur Cinema League, the announcement is made in February *Amateur Movie Makers* that home-study courses on motion-picture film, prepared by leading educators and already in use in public schools, are now offered for use in connection with home-movie projectors.

Eight of these courses, the first consisting of eighteen reels of Nature Study, are now ready for home-distribution on amateur width film, being sponsored by an agency which prepares such film-courses for public schools in co-operation with educational authorities and motion-picture experts. Subscribers to these home-movie courses will receive one reel of 400 feet—equivalent to 1,000 feet of theater-width film—each week, together with co-ordinated study-guides. Each film may be retained by the home for three days. Provision is also made to supply a projector at nominal rental to those homes not yet so equipped.

Contemplation of the developments which this new departure envisages, suggests the fascinating possibilities of the home motion-picture school as a great national institution supplementing and enriching the regular school-systems, according to Mr. Maxim. Parents and children, alike, he believes, will find absorbing interest, increased knowledge, and genuine pleasure in this new power invested in the home projector, which is now an adjunct in scores of thousands of homes. The plan itself is the conception of the Neighborhood Motion Picture Service, Inc., of New York and Chicago.

Telephoto-Lenses for the Ciné-Kodak F/1.9

OWNERS of the Ciné-Kodak Model B with F/1.9 lens equipment need no longer be confined to only the regular lens on the Kodak, which is of short focal length. The Wollensak Optical Company is now making a series of telephoto-lenses ranging in focal length from three inches to six inches, which can readily be adapted to the Kodak F/1.9. This company has specialised in photographic lenses and shutters for almost thirty years, and has for some time been making telephoto-lenses for the Filmo, Victor, and DeVry Cameras. Modifying the mechanical construction permits these to be readily attached to the Ciné-Kodak F/1.9 also.

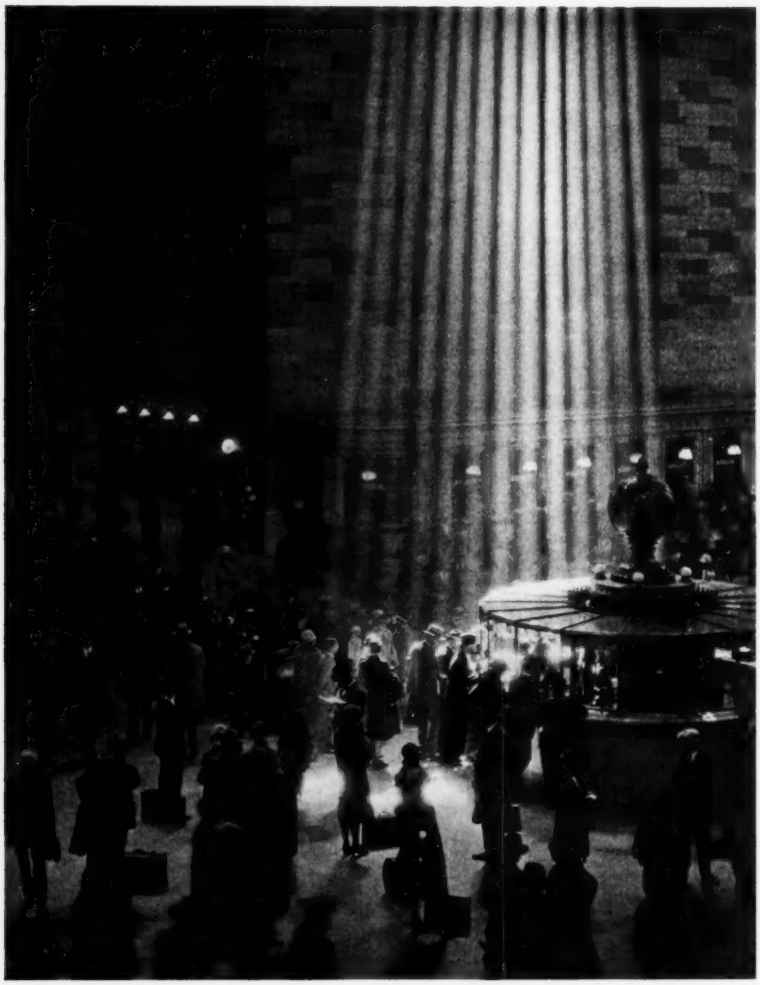
To fasten a telephoto-lens to the Ciné-Kodak F/1.9, all that is necessary is to remove the three small screws holding the F/1.9 lens to the Kodak and fasten the telephoto-lens in its place and in exactly the same manner. To facilitate the changing of lenses, large thumbscrews are supplied with the telephotos. This eliminates the necessity of carrying a screwdriver in the kit.

A telephoto-lens offers many advantages in movie-making. Very often the desire to photograph an object at a distance is discouraged when confronted with the fact that it is almost obscured when projected on the screen. A telephoto-lens magnifies the equivalent of its focal length and makes possible the photographing of distant or near-by objects, and in such proportions that make them appear as close-ups.

What Would You Like If You Could Get It?

SPRING is a good time to do mental and physical housecleaning. It is a good time to see where we stand and whether or not we are measuring up to what is required of us. So it is with this department, which appears to be very well received; but is there anything that can be done to make it of greater service? Do any of our readers think that we should do a little dusting here to make our movie section a bit more attractive? If it is satisfactory as it is, let us know it. We are too far from our ideal to become egotistical about a merited word of commendation. On the other hand, who is there that does not feel happier and better if sincere effort and hard work receive recognition? It is the greatest incentive to do more and better work than has ever been devised. Mr. McKay would like to hear from you, I know. This item he did not see or have a chance to edit.

A. H. BEARDSLEY.



SUNLIGHT—GRAND CENTRAL STATION
KENNETH DUDLEY SMITH
PITTSBURGH SALON, 1928